

Bornou
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Borondon.

gitude, and from 17 to 21 degrees of north latitude. The northern part is poor, and like the rest of the provinces of Zaara: but all the rest is well watered by springs and rivers that tumble down with a dreadful noise from the mountains; rendering the country prolific in corn, grass, and fruits, and giving it a pleasing aspect. The eastern and western frontiers are divided into mountains and valleys, the latter being all covered with flocks of cattle, fields of rice and millet, and many of the mountains with wood, fruit-trees, and cotton. On the north-west stands the mountain of Tarton, having plenty of good iron mines; and on the south flows the river Niger, which, it is said, after running a great many leagues under a long chain of mountains, rears up its head again, and mingles its streams with the waters of the lake Bornou in its course, from whence it washes the walls of the capital of this kingdom. The compilers of the Universal History, however, are of opinion, that in these mountains the river Niger hath its source, because no river hath been traced to the eastward, except the Nile, which runs in a different course from north to south, and the White river, on the western frontiers of Abyssinia, which is a branch of the Nile. The eastern and western parts of Bornou are inhabited by a people of a roving disposition, who live in tents, and have their women, children, and every thing else, in common; the word *property*, or any idea equivalent to it, being utterly unknown among them. They have neither religion, laws, government, nor any degree of subordination; and hence they have been supposed by Cluverius to be the lineal descendants of the ancient Garamantes, and this to have been the residence of that people. In these parts, the natives are almost to a man shepherds and husbandmen. In summer they go naked, except a short apron before; but in winter they are warmly clothed with the softest sheepskins, of which they also form their bed-clothes; and indeed this is scarce a sufficient defence against the inclemency of the weather at certain seasons of the year, when a cold piercing wind blows from the northern mountains that chills the blood in proportion as the pores of the body have been opened by the scorching heats of summer. Baudrand and Daper affirm, that the natives are scarce superior in their understanding to brutes; not even having any names whereby to distinguish each other, except what they take from some personal defect or singularity; such as lean, fat, squinting, hump-backed, &c. In the towns, however, it is acknowledged that they are something more civilized and polite, being many of them merchants; but of these towns, nor indeed of the kingdom in general, very little is known.

BOROMÆUS. See BOROMEUS.

BORONDON. (St.), an island in the Atlantic Ocean mentioned by some writers, particularly Linschotten, in their description of the Canary islands, as something supernatural. It is said to be about 100 leagues distant from Ferro, probably west, though no writer has pretended to lay down its exact situation. Here it is affirmed several ships have touched by accident, and all agree in their relations of the state of the inhabitants and island. They affirm, that it is perpetually clothed with a great variety of wood, chiefly fruit-trees: that the valleys are in a perpetual state of verdure; and continually decked with flowers, grass, and plants, the

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spontaneous productions of the earth; or with corn and pulse, cultivated with great care by the inhabitants; that the soil is so prolific as to raise large quantities of corn for exportation; and that the ships that call here never fail of meeting with refreshments of every kind. It is said to be peopled by Christians, who have a language of their own, apparently combined of a variety of modern languages; for say they, whoever understands the European tongues may make shift to hold conversation with this people. It is remarkable, that no ships, expressly sent upon this discovery, were ever fortunate enough to fall in with the island of St. Borondon, though the Spaniards have several times attempted it from the Canaries. Hence it has been called the *marvellous island*; and hence indeed we may conclude, either that it exists wholly in imagination, or at least that it is surrounded with such currents as insensibly carry ships out of their course, and prevent their meeting with it. Some writers affirm that it actually disappears upon certain occasions, and shifts its position; while others, with more appearance of truth, allege, that it is frequently overcast with thick and impenetrable clouds, which occasion the disappointment of all the adventurers who have gone in search of it.

BOROUGH, BURROUGH, *Borow*, or *Burgh*, is frequently used for a town or corporation which is not a city.

BOROUGH, in its original Saxon *borge*, or *borgh*, is by some supposed to have been primarily meant of a tithing or company consisting of ten families, who were bound and combined together as each others pledge. Afterwards, as Verstegan informs us, borough came to signify a town that had something of a wall or inclosure about it: so that all places which among our ancestors had the denomination borough, were one way or other fenced or fortified. But, in later times, the same appellation was also bestowed on several of the *villa insigniores*, or country towns of more than ordinary note, though not walled.

The ancient Saxons, according to Spelman, gave the name burgh to those called, in other countries, cities. But divers canons being made for removing the episcopal sees from villages and small towns to the chief cities, the name *city* became attributed to episcopal towns, and that of borough retained to all the rest; though these too had the appearance of cities, as being governed by their mayors, and having laws of their own making, and sending representatives to parliament, and being fortified with a wall and castle, and the like.

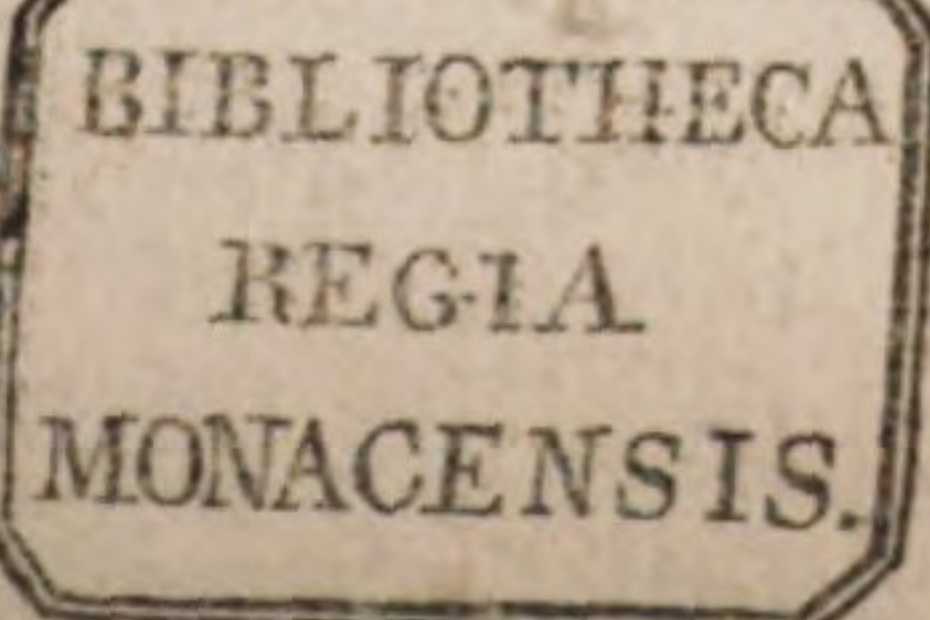
BOROUGH, or *burgh*, is now particularly appropriated to such towns and villages as send burgesses or representatives to parliament. Boroughs are equally such, whether they be incorporate or not; there being great numbers of our English boroughs not incorporated; and, on the contrary, several corporations that are not boroughs; *e. gr.* Kingston, Deal, Kendal, &c.

BOROUGHs, in Scotland. See LAW, N^o clviii. II.

Royal BOROUGHs, in Scotland, are corporations made for the advantage of trade, by charters granted by several of their kings; having the privilege of sending commissioners to represent them in parliament, besides other peculiar privileges. The Royal Boroughs are not only so many distinct corporations, but do also constitute one entire body, governed by, and accountable to, one general court, anciently called the court of

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Borough *four boroughs*, held yearly to treat and determine concerning matters relating to the common advantage of all boroughs. The four boroughs which composed this court were, Edinburgh, Stirling, Roxburgh, and Berwick; which two last falling into the hands of the English, Linlithgow and Lanerk were put in their places; with a saving to the former, whenever they should return to their allegiance. But this court not being sufficient to answer the necessities of the royal boroughs, they were all empowered, under James III. in 1487, to send commissioners to a yearly convention of their own, which was then appointed to be held at Inverkeithing, but is now held at Edinburgh, under the denomination of the *convention of boroughs*, vested with great power, and having for their object the benefit of trade and the general interest of the boroughs.

Borough-Courts, are certain courts held in boroughs, by prescription, charter, or act of parliament: such are the sheriff's court, and court of hustings, in London.

Borough-English, a customary descent of lands or tenements, in some ancient boroughs and copy-hold manors, by which the youngest son, and not the eldest, succeeds to the burgage tenement on the death of his father. For which Littleton gives this reason; because the younger son, by reason of his tender age, is not so capable as the rest of his brethren to help himself. Other authors have indeed given a much stranger reason for this custom; as if the lord of the fee had anciently a right to break the seventh commandment with his tenant's wife on her wedding night; and that therefore the tenement descended, not to the eldest, but to the youngest son, who was more certainly the offspring of the tenant. But it cannot be proved that this custom ever prevailed in England, though it certainly did in Scotland, (under the name of *mercheta* or *marcheta*), till abolished by Malcolm III. But perhaps a more rational account than either may be brought from the practice of the Tartars; among whom, according to Father Duhalde, this custom of descent to the youngest son also prevails. That nation is composed totally of shepherds and herdsmen; and the elder sons, as soon as they are capable of leading a pastoral life, migrate from their father with a certain allotment of cattle, and go to seek a new habitation. The youngest son, therefore, who continues latest with his father, is naturally the heir of his house, the rest being already provided for. And thus we find, that among many other northern nations it was the custom for all the sons but one to migrate from the father, which one became his heir. So that possibly this custom, wherever it prevails, may be the remnant of that pastoral state of the ancient Britons and Germans which Cæsar and Tacitus describe.

Borough-head, or *Head-borough*, called also *borough-bolder*, or *bursbolder*, the chief man of the decenna, or hundred, chosen to speak and act in behalf of the rest.

Head borough also signifies a kind of head constable, where there are several chosen as his assistants, to serve warrants, &c. See **CONSTABLE**.

BOROUGHBRIDGE, a town in the north riding of Yorkshire in England, seated on the river Your, over which there is a handsome stone bridge. The town is not large, but commodious, and sends two members to parliament. W. Long. 1. 15. N. Lat. 54. 10.

BOROZAIL, or the zeal of the Ethiopians, a dis-

ease epidemic in the countries about the river Senegal. **Borrachio**. It principally affects the pudenda, but is different from the lues venerea. It owes its rise to excessive venery: in the men this distemper is called *asab*, and in women *assabatus*. **Borrachio**. See **CAOUTCHOUK**.

BORRAGE. See **ANCHUSA**.

BORRELLISTS, in church-history, a Christian sect in Holland; so denominated from their founder Borrel, a person of great learning in the Hebrew, Greek, and Latin tongues. They reject the use of the sacraments, public prayer, and all other external acts of worship. They assert, that all the Christian churches of the world have degenerated from the pure apostolical doctrines, because they have suffered the word of God, which is infallible, to be expounded, or rather corrupted, by doctors who are not infallible. They lead a very austere life, and employ a great part of their goods in alms.

BORRICHIOUS, one of the most learned men of his age, the son of a Lutheran minister in Denmark, was born in 1626. He applied himself to physic in the university of Copenhagen, and began to practise during a most terrible plague that made great havoc in that city. He travelled: but before his departure, in 1660, he was appointed professor in poetry, botany, and chemistry; and at his return discharged his duties with great assiduity, of which the works he published afford full proof. He was raised to the office of counsellor in the supreme council of justice, in 1686; to that of counsellor of the Royal Chancery, in 1689; and died of the operation for the stone, in 1690. He published, 1. *Lingua pharmacopæorum*. 2. *Dissertationes de poeticis Græcis et Latinis*. 3. *De ortu et progressu chemiæ*; and several other works.

BORROMEUS (St Charles), cardinal, and archbishop of Milan; a personage of great note in the Romish kalendar, and whose sincere piety, simplicity of manners, and zeal for reformation, render him indeed a character equally interesting and instructive to the members of any church. He was the son of Gilbert Borromeus Count of Arona and of Mary of Medicis, and was born at the castle of Arona upon Lake Major in the Milanese in October 1538. When he was about 12 years old, Julius Cæsar Borromeus resigned an abbacy to him of a considerable revenue, which was considered as an hereditary inheritance of the family; which Charles accepted, but applied the revenue wholly in charity to the poor. Having acquired a sufficient knowledge of the languages at Milan, he studied the civil and canon law at Pavia, where he lived like another Lot in Sodom, preserving his innocence among a thousand snares by which it was endangered. He received great advantage from the company and conversation of Francis Alciat, one of the most learned men of the age, for whom he afterwards procured the purple. He would accept no new benefice but upon condition that he should be at liberty to apply the revenue to public uses. In the year 1554, Charles being then 16 years old, his father died, an event which brought him back to the castle of Arona; where, though he had an elder brother, Count Frederick, he was requested by the family to take upon him the management of the domestic affairs, to which at length he consented.

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Borromeus. After some time he returned again to his studies, which, in the year 1559, being then just 21, he finished by a solemn act, and took his doctor's degree. The promotion of his uncle to the pontificate, by the name of *Pius IV.* which happened the year following, seemed to have very little effect upon him; but he was very soon made protonotary, and intrusted both with the public and privy seal of the ecclesiastical state: he was also, at the same time, created cardinal deacon, and soon after archbishop of Milan. In obedience to the will of his uncle the pope, he lived in great splendor, having a brilliant retinue and a great number of domestics; yet his own temperance and humility were never brought into question. In order to render even his amusements useful, he established an academy of select and learned persons, as well ecclesiastics as laics, from among his household and dependants, who were employed in some exercise which tended to inspire a love of virtue, and to form a just taste. Each of them was to write upon some chosen subject, either in verse or in prose, and to communicate to each other in frequent conferences the fruits of their studies. The works produced by this society have been published in many volumes, under the title of *Noctes Vaticanae*, because these useful assemblies were held at the Vatican, and at night after the business of the day was over. About this time Charles also formed a design of founding a college at Pavia, which should at the same time be a school of science and an asylum from the vices and vanities of the world. In prosecution of this design, he raised a large edifice upon the foundations of several houses which belonged to the family of Borromeus in that city; he obtained from the pope several benefices, which he attached to his building; he provided it with all things necessary for the young scholars out of his own revenue; and he dedicated his college to St Justina virgin and martyr.

Upon the death of his only brother Frederick, his relations, his friends, and even the pope himself, advised him to change his state, to quit the church, and marry, that his family might not become extinct. Charles, however, contrary to this advice and the expectations of the world, received the priesthood, and addressed the pope in these terms: "Do not complain of me, Holy Father, for I have taken a spouse whom I love and on whom my wishes have been long fixed." From this time he became more fervent in exercises of piety and ecclesiastical knowledge: he perceived that some literati who had departed from the faith had also corrupted the writings of some holy doctors of the church, and he thought he should render religion good service if he could restore the genuine reading: He therefore employed Achilles Statius, a portuguese of great learning, in this work, whom for that purpose he retained at Rome. To his zeal and attention also is owing the congregation of eight cardinals, still subsisting, to resolve doubts and obviate difficulties which should arise in explanations of the council of Trent.

There was a very intimate friendship between Borromeus and Don Barthelemy des Martyrs archbishop of Prague, and author of a work intitled *Stimulus Pastorum*. This work falling into Borromeus's hands gave him an earnest desire to become a preacher, as he was now convinced that preaching was one of the principal duties of a prelate. An almost inconceivable

multiplicity of business, ill health, a feeble voice, and a difficult pronounciation, were no inconsiderable obstacles to his design, yet he surmounted them all; and though his beginnings were weak, yet perseverance crowned them with success.

Having obtained permission to visit his church, which the pope had hitherto refused as he found his presence necessary at Rome, he prepared to set out for Milan. He had before sent thither his grand vicar Ormanetus, whose labours at first had not been unsuccessful, but who soon found oppositions so pertinacious and obstinate as put an end to his hopes: Borromeus therefore saw the necessity of going in person, and he was received with the most distinguished honours. He was, however, soon recalled to Rome, where many things made his presence necessary: the pope was gradually dying; and Charles arrived just time enough to administer to him the last sacraments.

Pius IV. died on the 7th of January 1566, and 28 days afterwards Cardinal Alexandrine mounted the papal chair, and assumed the name of *Pius V.* the skill and diligence of Borromeus having contributed not a little to prevent the cabals of the conclave.

As soon as this event had taken place, and all was quiet at Rome, Borromeus gave himself wholly up to the reformation of his diocese, where the most flagitious irregularities were openly practised, having first made another reform in his own family. He began by making pastoral visits in his metropolis, where the canons were not distinguished for the purity of their manners. He soon restored proper decency and dignity to divine service, by a variety of wise and necessary regulations: In conformity to the decrees of the council of Trent, he cleared the cathedral of many pompous tombs, rich ornaments, banners, arms, and in general of all the trophies with which the vanity of man had disfigured the house of God; and in order to give a sanction to his zeal by his example, he spared not the monuments of his nearest relations. Nor did his zeal stop here: he divided the nave of the church through its whole length into two parts, by strong thick planks, that the two sexes, being separated, might perform their devotions without any attention to each other, and with a modesty and recollection more suitable to the place.

This pastoral care extended from the cathedral to the collegiate churches, and even to the fraternities or societies of penitents, particularly that of St John the Baptist. The duty of this society was to attend criminals to the place of punishment, to assist, comfort, and prepare them for death; but the spirit of the institution was now forgotten, and the wretches who were condemned to death were commonly dragged to execution like beasts, without any spiritual assistance or consolation. But the archbishop revived the original fervor of this order, in the exercise of their peculiar duty, and persuaded many of the nobility and principal persons of the city to become members of a society appropriated to so eminent a branch of Christian charity. The reformation of the monasteries followed that of the churches, and the vigilance of the pastor soon extended itself from the city to the country round it, which abounded with irregularities that required his correction. The great abuses and irregularities which had over-run the church at this time arose prin-

Borromeus cipally from the gross ignorance of the clergy; in order therefore to attack these evils at the root, Charles established seminaries, colleges, and communities, for the education of young persons intended for holy orders. He met with many difficulties, and much opposition in his endeavours to bring about a reformation of manners; but he prevailed against every obstacle by an inflexible constancy, tempered with great sweetness of manners.

The governor of the province, and many of the senators, were apprehensive that the cardinal's ordinances and proceedings would encroach upon the civil jurisdiction, and become inconsistent with the rights of his catholic majesty, to whom the duchy of Milan was then in subjection. And this was a fruitful source of remonstrances, representations, and complaints, which long troubled the courts of Rome and Madrid, and which the king of Spain, Philip II. referred entirely to the decision of the pope. But Borromeus had a more formidable opposition to struggle with, that of several religious orders, particularly the Brothers of Humility. Three provosts of this society entered into a conspiracy to cut him off; and one of their confederates, called *Jerom Donat*, whose surname was *Farina*, took upon him to carry the design into execution. For this purpose he mixed with the crowd that went into the archiepiscopal chapel, where the cardinal spent an hour every evening in prayer with his domestics and other pious persons; and having watched his opportunity, he fired an arquebuss at him, which was loaded with a ball suited to the bore of the piece, and with a considerable charge of leaden shot. It is said that the ball struck him on the spinal bone, but fell down at his feet without doing any other damage than soiling his rochet, and that one of the shot penetrated his clothes to the skin, and there stopped, without imprinting any wound, which was considered as a miracle, especially as the other shot tore away part of a wall, and went quite through a table.

In the year 1576, the city and diocese of Milan were visited by the plague, which swept away incredible numbers; and the behaviour of Borromeus, on this occasion, was truly christian and heroic: he not only continued on the spot, but he went about giving directions for accommodating the sick, and burying the dead, with a zeal and attention that were at once ardent and deliberate, minute and comprehensive; and his example stimulated others to join in the good work. He avoided no danger, and he spared no expence; nor did he content himself with establishing proper regulations in the city, but went out into all the neighbouring parishes where the contagion raged, distributing money to the poor, ordering proper accommodations for the sick, and punishing those, especially the clergy, who were remiss in the duties of their calling. Charles, notwithstanding the fatigue and perplexity which he suffered by thus executing his pastoral charge, abated nothing of the usual austerity of his life, nor omitted any of his stated devotions; for, whatever approached to luxury or magnificence, he considered as incompatible with the propriety of his character. It happened, that being once on a visit to the archbishop of Sienna at his palace, a very sumptuous entertainment was provided for him. Borromeus, though he had been used to content himself with bread and wa-

ter, yet sat down at the table, where however he eat but little, and gave sufficient intimation that he was much displeased with such ostentatious prodigality; but what was his surprise when he saw the table again covered with a desert, consisting of whatever was most rare, exquisite, and costly? He immediately rose hastily from his seat, as if he had suddenly recollected some pressing business, and gave orders for his departure, notwithstanding the rain, and the most earnest entreaties of the archbishop. "My Lord," said the cardinal, "if I should tarry here to-night, you would give me another such treat as that I have just seen, and the poor will then suffer another loss, great numbers of whom might have been fed with the superfluities that have been now set before us."

The continual labours and austerities of Borromeus naturally shortened his life; he went to Vercal to put an end, if possible, to the divisions which threatened the most fatal consequences: and, when he was there, he received a message from the duke of Savoy, requesting his presence at Turin. From Turin he retired to a place called the *Sepulchre*, on the mountain Varais, where he was seized with an intermittent fever, which scarce permitted him to return alive to Milan, where he arrived on the 3d of November 1584, and died the next day. He was lamented by the city and the whole province with such marks of sincere sorrow as are rarely seen; and he was immediately worshipped as a saint without waiting for the pope's approbation. The pope, however, when he was told of it by Cardinal Baronius, gave directions that the devotion of the people should not be restrained, though Borromeus was not canonized till the 1st of November 1610, in the pontificate of Leon XI. Since that time many churches and chapels have been erected in honour of this saint, and many religious societies instituted and put under his protection.

The foregoing particulars are extracted from an account of the life of Borromeus, written some years ago by Father Anthony Touron. Upon a comparison of this life with that written by Ribadeneira a Spanish Jesuit above a century ago, it appears that the improvement of knowledge has made a very striking difference in this kind of biography. Ribadeneira, who lived in the midst of ignorance and superstition, did not suspect that the time was at hand when the incredible and ridiculous fables he recites could not be believed: his life of this saint therefore abounds with particulars which Touron has justly omitted. We are told that a miraculous light was seen over the chamber of Borromeus's mother when she was in labour: That Borromeus, seeing two persons carried violently down a rapid river on their horses, and just ready to perish, caused their horses suddenly to leap with them out of the water, by giving them his benediction: That Occlavian Varese, a gentleman of Milan, who was confined to his bed by sickness, when Borromeus died became instantly well, by recommending himself to the Saint's intercession. That a daughter of Julius Bonacina was instantly cured of a disorder in her eye, which had taken away the sight of it, by performing an act of devotion in honour of this Saint: That a count of Ferrara was instantly seized with a violent disease upon speaking irreverently of Borromeus's picture, but was cured upon confessing his fault. It would certainly be

Borrowing a work of infinite service to the Romish church, to new-write the lives of her saints in such a manner as can now be believed, since the lives already written might by that means be gradually superceded, which are a better antidote against Popery than the arguments of the best reasoner in the world.

BORROWING AND HIRING, in law, are contracts by which a qualified property may be transferred to the hirer or borrower; in which there is only this difference, that hiring is always for a price or stipend, or additional recompence; borrowing is merely gratuitous. But the law in both cases is the same. They are both contracts, whereby the possession and transient property is transferred for a particular time or use, on condition and agreement to restore the goods so hired or borrowed, as soon as the time is expired, or the use performed, together with the price or stipend (in case of hiring) either expressly agreed upon by the parties, or left to be implied by law, according to the value of the service. By this mutual contract, the hirer or borrower gains a temporary property in the thing hired, accompanied with an implied condition to use it with moderation, and not to abuse it; and the owner or lender retains a reversionary interest in the same, and acquires a new property in the price or reward. Thus, if a man hires or borrows a horse for a month, he has the possession and a qualified property therein during that period; on the expiration of which his qualified property determines, and the owner becomes (in case of hiring) intitled also to the premium or price for which the horse was hired.

There is one species of this price or reward the most usual of any, but concerning which many good and learned men have in former times very much perplexed themselves and other people, by raising doubts about its legality *in foro conscientiae*. That is, when money is lent on a contract to receive not only the principal sum again, but also an increase by way of compensation for the use, which is generally called *interest* by those who think it lawful, and *usury* by those who do not so. But as to this, see the article **INTEREST**.

BORROWSTOWNNESS. See **BURROWSTOWNNESS**.

BORSEHOLDER, among the Anglo-Saxons, one of the lowest magistrates, whose authority extended only over one freeburgh, tithing, or decennary, consisting of ten families. Every freeman who wished to enjoy the protection of the laws, and not to be treated as a vagabond, was under the necessity of being admitted a member of the tithing where he and his family resided; and in order to obtain this admission, it was as necessary for him to maintain a good reputation; because all the members of each tithing being mutual pledges and sureties for each other, and the whole tithing sureties to the king for the good behaviour of all its members, they were very cautious of admitting any into their society who were of bad or doubtful characters. Each tithing formed a little state or commonwealth within itself, and chose one of its most respectable members for its head, who was sometimes called the *alderman* of such a tithing or freeburgh, on account of his age and experience, but most commonly *borsholder*, from the Saxon words *borh*, "a surety," and *alder*, "a head or chief." This magistrate had authority to call together the members of his tithing, to preside in their meetings, and to put their sentences in execution. The members of

each tithing, with their tithing-man or borseholder at their head, constituted a court of justice, in which all the little controversies arising within the tithing were determined. If any dispute of great difficulty or importance happened, or if either of the parties was not willing to submit to a sentence given in the tithing-court, the cause was referred or appealed to the next superior court, or court of the hundred.

BORSET, or **BORSETT**, celebrated for its baths, a place about half a league from Aix-la-Chapelle in Germany. The abbey here is a very magnificent pile of building. It was formerly a monastery; but serves for a nunnery, whose abbess is a princess of the empire, and lady of Borset. The waters are warm, and of the nature of those of Aix-la-Chapelle; but they are only used as baths for the diseases in which the waters last mentioned are recommended, and also in dropical and œdematous cases. The waters are distinguished into the upper and lower springs. The former were found by Dr Simmons to raise the thermometer to 158°, the latter to only 127°. All the baths are supplied by the first. Dr Simmons observed that these waters were much less sulphureous than those of Aix-la-Chapelle, probably on account of their greater heat. He likewise found that they abounded much with selenites, which incrust the pipe through which the water passes, and likewise the sides of the bath.

BORYSTHENES. See **BORISTHENES**.

BOS (John Baptist du), a celebrated author and member of the French academy, was born at Beauvais in 1670, and finished his studies at the Sorbonne. In 1695, he was made one of the committee for foreign affairs under Mr Torez; and was afterwards charged with some important transactions in England, Germany, Holland, and Italy. At his return to Paris, he was handsomely preferred, made an abbé, and chosen perpetual secretary of the French academy. He was the author of several excellent works; the principal of which are, 1. Critical reflections upon poetry and painting, 3 vols 12mo. 2. The history of the four Gordians, confirmed and illustrated by medals. 3. A critical history of the establishment of the French monarchy among the Gauls, 2 vols 4to, 4 vols 12mo. He died at Paris on the 23d of March 1742.

Bos (Lewis Janssen), an esteemed painter, was born at Bois-le-Duc. Having been carefully instructed in the art of painting by the artists of his native city, he applied himself entirely to study after nature, and rendered himself very eminent for the truth of his colouring and the neatness of his handling. His favourite subjects were flowers, and curious plants, which he usually represented as grouped, in glasses, or vases of crystal, half filled with water; and gave them so lovely a look of nature, that it seemed scarce possible to express them with greater truth or delicacy. It was frequent with this master to represent the drops of dew on the leaves of his objects, which he executed with an uncommon transparency; and embellished his subjects with butterflies, bees, wasps, and other insects, which Sandrart says, were superior to any thing of that kind performed by his cotemporary artists. He likewise painted portraits with very great success; and showed as much merit in that style as he did in his compositions of still life. He died in 1507.

BOS, in zoology, a genus of quadrupeds belonging to the order of pecora. The characters of this genus

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are taken from the horns and teeth. The horns are hollow within; and turned forward, in the form of crescents: There are eight fore-teeth in the under jaw, and none in the upper, their place being supplied by a hard membrane; and there are no dog-teeth in either jaw. Linnæus enumerates six species, viz.

I. The TAURUS, including the bull and cow, has cylindrical horns bent outwards, and loose dewlaps. The bull, or male, is naturally a fierce and terrible animal. When the cows are in season, he is perfectly ungovernable, and often altogether furious. When chaffed, he has an air of sullen majesty, and oft tears up the ground with his feet and horns. The principal use of the bull is to propagate the species; although he might be trained to labour, his obedience cannot be depended on. A bull, like a stallion, should be the most handsome of his species. He should be large, well-made, and in good heart; he should have a black eye, a fierce aspect, but an open front; a short head; thick, short, and blackish horns, and long shaggy ears; a short and straight nose, large and full breast and shoulders, thick and fleshy neck, firm reins, a straight back, thick fleshy legs, and a long tail well covered with hair. Castration remarkably softens the nature of this animal; it destroys all his fire and impetuosity, and renders him mild and tractable, without diminishing his strength; on the contrary, after this operation, his weight is increased, and he becomes fitter for the purposes of ploughing, &c.

The best time for castrating bulls is at the age of puberty, or when they are 18 months or two years old; when performed sooner, they often die. However, it is not uncommon to castrate calves a few days after birth. But such as survive an operation so dangerous to their tender age, generally grow larger and fatter, and have more courage and activity than those who are castrated at the age of puberty. When the operation is delayed till the age of six, seven, or eight years, they lose but few of the qualities of bulls; are much more furious and untractable than other oxen; and when the cows are in season, they go in quest of them with their usual ardour.

The females of all those species of animals which we keep in flocks, and whose increase is the principal object, are much more useful than the males. The cow produces milk, butter, cheese, &c. which are principal articles in our food, and besides answer many useful purposes in various arts. Cows are generally in season, and receive the bull, from the beginning of May to the middle of July. Their time of gestation is nine months, which naturally brings the veal or calves to our markets from the beginning of January to the end of April. However, luxury has fallen upon methods of interrupting this natural course, and veal may be had almost every month in the year. Cows, when improperly managed, are very subject to abortion. In the time of gestation, therefore, they ought to be observed with more than ordinary care, lest they should leap ditches, &c. Neither should they be suffered to draw in the plough or other carriage, which is a practice in some countries. They should be put into the best pasture, and should not be milked for six weeks or two months before they bring forth their young. The calf should be allowed to suck and follow its mother during the first six or eight days. After this it

begins to eat pretty well, and two or three sucks in a day will be sufficient. But if the object be to have it quickly fattened for the market, a few raw eggs every day, with boiled milk, and a little bread, will make it excellent veal in four or five weeks. This management of calves applies only to such as are designed for the butcher. When they are intended to be nourished and brought up, they ought to have at least two months suck; because the longer they suck, they grow the stronger and larger. Those that are brought forth in April, May, or June, are the most proper for this purpose; when calved later in the season, they do not acquire sufficient strength to support them during the winter. The cow comes to the age of puberty in 18 months, but the bull requires two years: but although they are capable of propagating at these ages, it is better to restrain them till they be full three years. From three to nine years those animals are in full vigour; but when older, they are fit for nothing but to be fed for the butcher. A milk-cow, ought to be chosen young, fleshy, and with a brisk eye.

The heaviest and most bulky animals neither sleep so profoundly, nor so long, as the smaller ones. The sleep of the ox is short and slight; he wakes at the least noise. He lies generally on the left side, and the kidney of that side is always larger than the other. There is great variety in the colour of oxen. A reddish or black colour is most esteemed. The hair should be glossy, thick, and soft; for when otherwise, the animal is either not in health, or has a weakly constitution. The best time for inuring them to labour is at the age of two and a half or three years. The ox eats very quick, and soon fills his first stomach; after which he lies down to ruminate or chew the cud. The first and second stomachs are continuations of the same bag, and very capacious. After the grass has been chewed over again, it is reduced to a kind of mash, not unlike boiled spinage; and under this form it is sent down to the third stomach, where it remains and digests for some time; but the digestion is not fully completed till it comes to the fourth stomach, from which it is thrown down to the guts. The contents of the first and second stomachs are a collection of grass and other vegetables roughly macerated; a fermentation, however, soon commences, which makes the grass swell. The communication between the second and third stomach is by an opening much smaller than the gullet, and not sufficient for the passage of the food in this state. Whenever then the two first stomachs are distended with food, they begin to contract, or rather perform a kind of reaction. This reaction compresses the food, and makes it endeavour to get out: now the gullet being larger than the passage between the second and third stomachs, the pressure of the stomach necessarily forces it up the gullet. The action of ruminating, however, appears to be in a great measure voluntary; as animals of this kind have a power of encreasing the reaction of their stomachs. After the food undergoes a second mastication, it is then reduced into a thin pulp, which easily passes from the second to the third stomach, where it is still further macerated; from thence it passes to the fourth, where it is reduced to a perfect mucilage, every way prepared for being taken up by the lacteals, and converted into nourishment. What confirms this account of chewing the cud is, that

Bos.

Bos. that as long as these animals suck or feed upon liquid aliment, they never ruminate; and in the winter, when they are obliged to feed upon hay and other dry victuals, they ruminate more than when they feed upon fresh grass.

Bulls, cows, and oxen, are fond of licking themselves, especially when lying at rest. But this practice should be prevented as much as possible; for as the hair is an undigestible substance, it lies in the stomach or guts, and is gradually coated by a glutinous substance, which in time hardens into round stones of a considerable bulk, which sometimes kills them, but always prevents their fattening, as the stomach is rendered incapable of digesting the food so well as it ought.

Buffon Hist. Naturelle.

The age of these animals may be distinguished by the teeth and horns. The first fore-teeth fall out at the age of six months, and are succeeded by others of a darker colour, and broader. At the end of sixteen months, the next milk-teeth likewise fall out; and at the beginning of the fourth year all the fore-teeth are renewed, and then they are long, pretty white, and equal: However, as the animal advances in years, they become unequal and blackish. The horns of oxen four years of age, are small pointed, neat, and smooth, but thickest near the head: This thick part next season is pushed further from the head by a horny cylinder, which is also terminated by another swelling part, and so on (for as long as the ox lives, the horns continue to grow); and these swellings become so many annular knots by which the age may easily be reckoned: But from the point to the first knot must be counted three years, and every succeeding knot only one year. The bull, cow, and ox, generally live about fourteen or fifteen years.

Ox-beef is very nourishing, and yields a strong aliment; the flesh of a cow, when well fatted and young, is not much inferior. Bull-beef is hard, tough, and dry; for which reason it is not much used for food. Veal is well tasted, easy of digestion, and rather keeps the body open than otherwise.

The northern countries of Europe produce the best cattle of this kind. In general, they bear cold better than heat; for this reason they are not so plenty in the southern countries. There are but few in Asia to the south of Armenia, or in Africa beyond Egypt and Barbary. America produced none till they were carried there by the Europeans. But the largest are to be met with in Denmark, Podolia, the Ukrain, and among the Calmuck Tartars; likewise those of Ireland, England, Holland, and Hungary, are much larger than those of Persia, Turkey, Greece, Italy, and Spain; but those of Barbary are least of all. In all mountainous countries, as Wales, the Highlands of Scotland, &c. the black cattle are small; but hardy, and when fattened make excellent beef. In Lapland, they are mostly white, and many of them want horns.

Synopsis of Quadrupeds.

The British breed of cattle, Mr Pennant observes, has in general been so much improved by foreign mixture, that it is difficult to point out the original kind of these islands. Those which may be supposed to have been originally British are far inferior in size to those on the northern part of the European continent; the cattle of the Highlands of Scotland are exceedingly small; and many of them, males as well as females, are hornless; the Welsh runts are much larger; the black

cattle of Cornwall are of the same size with the last. The large species that is now cultivated through most parts of Great Britain, are either entirely of foreign extraction, or our own improved by a cross with the foreign kind. The Lincolnshire kind derive their size from the Holstein breed; and the large hornless cattle that are bred in some parts of England, come originally from Poland.

About 250 years ago, there was found in Scotland a wild race of cattle, which were of a pure white colour, and had, if we may believe Boethius, manes like lions. Mr Pennant says, he cannot but give credit to the relation; having seen in the woods of Drumlanrig in North Britain, and in the park belonging to Chillingham castle in Northumberland, herds of cattle probably derived from the savage breed. They had lost their manes, but retained their colour and fierceness; they were of a middle size, long legged, and had black muzzels and ears; their horns fine, and with a bold and elegant bend.—The keeper of those at Chillingham said, that the weight of the ox was 38 stones; of the cow, 28; that their hides were more esteemed by the tanners than those of the tame; and they would give sixpence per stone more for them. These cattle were wild as any deer; on being approached, they would instantly take to flight, and gallop away at full speed; never mix with the tame species: nor come near the house, unless constrained to it by hunger in very severe weather. When it is necessary to kill any, they are always shot: if the keeper only wounds the beast, he must take care to keep behind some tree, or his life would be in danger from the furious attacks of the animal, which will never desist till a period is put to its life.

Frequent mention is made of our savage cattle by historians. One relates, that Robert Bruce was (in chasing these animals) preserved from the rage of a wild bull by the intrepidity of one of his courtiers, from which he and his lineage acquired the name of *Turn-bull*. Fitz Stephen * names these animals (*ur-sylvestres*) among those that harboured in the great forest that in his time lay adjacent to London. Another preserved enumerates, among the provisions at the great feast of Nevil archbishop of York, six wild bulls; and Sibbald assures us, that in his days a wild and white species was found in the mountains of Scotland, but agreeing in form with the common sort. These were probably the same with the *bifontes jubati* of Pliny found then in Germany, and might have been common to the continent and our island; the loss of their savage vigour by confinement might occasion some change in the external appearance, as is frequent with wild animals deprived of liberty; and to that we may ascribe their loss of mane. The urus of the Hercynian forest described by Cæsar (lib. vi.) was of this kind; the same which is called by the modern Germans, *aurochs*, i. e. *bos sylvestris*. * History of London preserved in Leland's Itin. VIII.

The ox is the only-horned animal in these islands that will apply its strength to the service of mankind. It is now generally allowed, that, in the draught, oxen are in many cases more profitable than horses; their food, harness, and shoes, being cheaper; and should they be lamed or grow old, an old working beast will be as good meat, and fatten as well, as a young one.

There is scarce any part of this animal without its use.

Bos.

use. The blood, fat, marrow, hide, hair, horns, hoofs, milk, cream, butter, cheese, whey, urine, liver, gall, spleen, bones, and dung, have each their particular use in manufactures, commerce, and medicine.

The skin has been of great use in all ages. The ancient Britons, before they knew a better method, built their boats with osiers, and covered them with the hides of bulls, which served them for short coasting voyages.

*Primum cana salix madefacto vimine parvam
Texitur in puppim, caesoque induta juvenco,
Vestris patiens, tumidum super emicat amnem:
Sic Venetus stagnante Pado, fusoque Britannus
Navigat oceano.*

LUCAN. lib. iv. 131.

The bending willow into barks they twine;
Then line the work with spoils of slaughter'd kine.
Such are the floats Venetian-fishers know,
When in dull marshes stands the settling Po;
On such to neighb'ring Gaul, allur'd by gain,
The bolder Britons cross the swelling main.

ROWE.

Vessels of this kind are still in use on the Irish lakes; and on the Dee and Severn: In Ireland they are called *curach*; in English, *coracles*; from the British *cwraugl*, a word signifying a boat of that structure. At present the hide, when tanned and curried, serves for boots, shoes, and numberless other conveniences of life.—

Campbell's
Political
Survey.

Vellum is made of the thinnest calve-skins, and the skins of abortions. Of the horns are made combs, boxes, handles for knives, and drinking vessels; and when softened by water, obeying the manufacturer's hands, they form pellucid laminæ for the sides of lanterns. These last conveniences were invented by the great king Alfred, who first used them to preserve his candle time-measurers from the wind; or (as other writers will have it) the tapers that were set up before the reliques in the miserable tattered churches of that time. The very smallest fragments, and even the dust and filing, of horn, are found very serviceable in manuring cold lands. The matter lying within, on which the horn is formed, is called the *slough*; and, when dry, is used in making walls or fences, in which, covered from wet, it will last a long time. It is also most admirable in mending roads, where the soil is soft and spewy; for, dissolving, it becomes a glutinous substance, that binds amazingly with gravel. As a manure, they allow between two and three quarter-sacks to an acre. Horn saw-dust with mould is an excellent compost for flowers. It is also of use in hardening, and giving what is called a proper temper, to metals. In medicine, horns were employed as alexipharmics or antidotes against poison, the plague, or the small-pox; they have been dignified with the title of *English bazoar*, and are said to have been found to answer the end of the oriental kind.

The teguments, cartilages, and gristles, for the indifferant,—and, for the finer, all the cuttings, parings, and scrapes of hides,—are boiled in water, till the gelatinous parts of them are thoroughly dissolved; and the mass, properly dried, becomes glue. See GLUE.

The bones are used by mechanics where ivory is too expensive; by which the common people are served with many neat conveniences at an easy rate. From the tibia and carpus bones is procured an oil much used by coach-makers and others in dressing and cleaning

Bos.

harness, and all trappings belonging to a coach; and the bones calcined afford a fit matter for tests for the use of the refiner in the smelting trade. The blood is used as an excellent manure for fruit-trees, and is the basis of that fine colour the Prussian blue. The sinews are prepared so as to become a kind of thread or small cord, used in sewing saddles, in making racquets, and other things of a like nature. The hair hath also its value, and is employed in many different ways. The long hair of the tail is frequently mixed with horse hair spun into ropes, and sometimes wove. The short hair serves to stuff saddles, seats of several kinds, mattresses, and chairs. The refuse is a good manure, and operates more speedily than the horns. The fat, tallow, and suet, furnish us with light; and are also used to precipitate the salt that is drawn from briny springs. The gall, liver, spleen, and urine, had also their place in the materia medica, though they have now resigned it to more efficacious and agreeable medicines. The uses of butter, cheese, cream, and milk, in domestic œconomy, and the excellence of the latter in furnishing a palatable nutriment for most people whose organs of digestion are weakened, are too obvious to be insisted on.

II. The BONASUS has a long mane: its horns are bent round towards the cheek, and are not above a span long. It is about the size of a large bull, and is a native of Africa and Asia. When enraged, he throws out his dung upon dogs or other animals that annoy him; the dung has a kind of caustic quality, which burns the hair off any animal it falls upon.

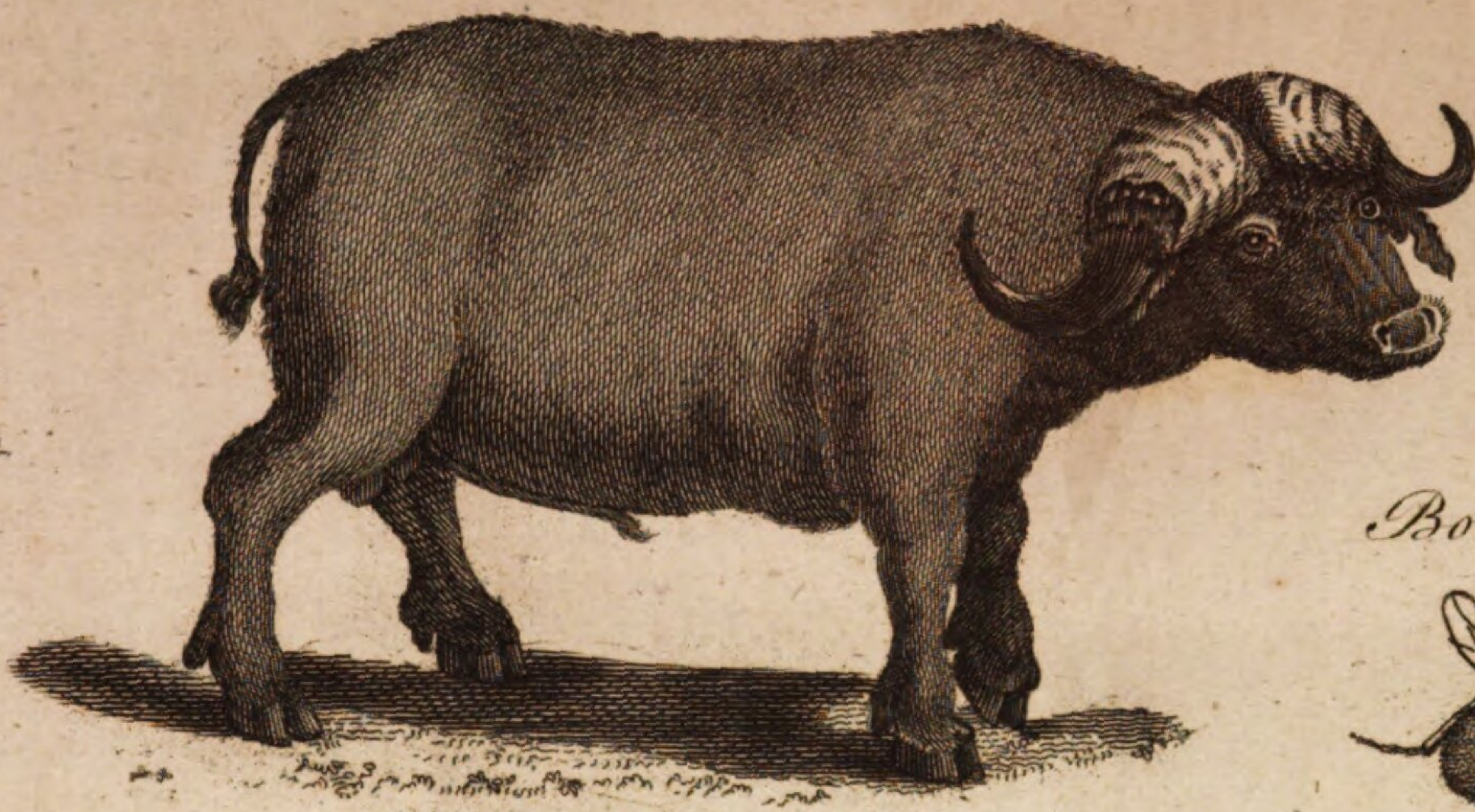
III. The BISON has short black rounded horns, with a great interval between their bases. On the shoulders is a vast hunch, consisting of a fleshy substance, much elevated. The fore parts of the body are thick and strong; the hind-part, slender and weak. The hunch and head are covered with a very long undulated fleece, divided into locks, of a dull rust-colour: this is at times so long, as to make the fore-part of the animal of a shapeless appearance, and to obscure its sense of seeing. During winter, the whole body is clothed in the same manner. In summer the hind part of the body is naked, wrinkled, and dusky. The tail is about a foot long; at the end is a tuft of black hairs, the rest naked. It inhabits Mexico and the interior parts of north America. It is found in great herds in the Savannas; and is fond of marshy places, where it lodges amidst the high reeds. In Louisiana they are seen feeding in herds innumerable, promiscuously with multitudes of stags and deer, during morning and evening; retiring in the sultry heats into the shade of tall reeds, which border the rivers of America. They are exceedingly shy; and very fearful of man, unless they are wounded, when they pursue their enemy, and become very dangerous.

The chase of these animals is a favourite diversion of the Indians; and is effected in two ways. First, by shooting: when the marksman must take great care to go against the wind; for their smell is so exquisite, that the moment they get scent of him they instantly retire with the utmost precipitation. He aims at their shoulders, that they may drop at once, and not be irritated by an ineffectual wound. Provided the wind does not favour the beasts, they may be approached very near, being blinded by the hair which

*Fig. 1. Bos. 3 b.
The Cape Ox.*

Plate CI.

Buprestis.



Bombylius.



*Fig. 2. Bos 3 a.
Musk Bull & Cow.*



A. Bell Prin. W. A. Sculptor fecit.

Bos.

which covers their eyes.—The other method is performed by a great number of men, who divide and form a vast square: each band sets fire to the dry grass of the savannah where the herds are feeding: these animals having a great dread of fire which they see approach on all sides, they retire from it to the centre of the square; when the bands close and kill them (pressed together in heaps) without the least hazard. It is pretended, that on every expedition of this nature they kill 1500 or 2000 beeves. The hunting-grounds are prescribed with great form, lest the different bands should meet and interfere in the diversion. Penalties are enacted on such who infringe the regulations, as well as on those who quit their posts and suffer the beasts to escape from the hollow squares; the punishments are, the stripping the delinquents, the taking away their arms (which is the greatest disgrace a savage can undergo), or lastly the demolition of their cabins.

The uses of these animals are various. Powder-flasks are made of their horns. The skins are very valuable; in old times the Indians made of them the best targets. When dressed, they form an excellent buff; the Indians dress them with the hair on, and clothe themselves with them; the Europeans of Louisiana use them for blankets, and find them light, warm, and soft. The flesh is a considerable article of food, and the bunch on the back is esteemed a very great delicacy. The bulls become excessively fat, and yield great quantities of tallow, 150 pounds weight having been got from a single beast, which forms a considerable matter of commerce. These over-fed animals usually become the prey of wolves; for, by reason of their great unwieldiness, they cannot keep up with the herd. The Indians, by a very bad policy, prefer the flesh of the cows; which in time will destroy the species: they complain of the rankness of that of the bulls; but Du Pratz thinks the last much more tender, and that the rankness might be prevented by cutting off the testicles as soon as the beast is killed. The hair or wool is spun into cloth, gloves, stockings, and garters, which are very strong, and look as well as those made of the best sheeps wool; Governor Pownall assures us, that the most luxurious fabric might be made of it. The fleece of one of these animals has been found to weigh eight pounds.

Their sagacity in defending themselves against the attacks of wolves is admirable. When they scent the approach of a drove of those ravenous creatures, the herd flings itself into the form of a circle: the weakest keep in the middle; the strongest are ranged on the outside, presenting to the enemy an impenetrable front of horns: should they be taken by surprise, and have recourse to flight, numbers of the fattest or the weakest are sure to perish. Attempts have been made to tame and domesticate the wild, by catching the calves and bringing them up with the common kind, in hopes of improving the breed; but it has not yet been found to answer: notwithstanding they had the appearance for a time of having lost their savage nature, yet they always grew impatient of restraint, and by reason of their great strength would break down the strongest inclosure, and entice the tame cattle into the corn-fields. They have been known to engender together, and to breed.

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a, The *musk-ox* of Hudson's bay, a variety of this species, wants the hump between the shoulders. It is about the size of a Scotch bullock; has a thick body, and short legs. The horns are large, and very remarkable: they are united at their origin in the skull; but immediately after, they fall down on each side of the crown of the head, then taper away small, the points turning up. The hair is black, and grows to a great length; underneath which is a fine wool superior to Vigonia wool. The male only has the curious scalp; the female is covered with hair. These animals frequent the country about 100 miles inwards to the north-west of Churchill river, in Hudson's bay, where they are very numerous. They live in herds of 30, 40, and upwards to the number of 80 or 100. The bulls are very few in proportion to the cows: for, according to Mr Graham's information, it is rare to see more than two or three full-grown bulls with the largest herd; and from the number of males which at times are found dead, the Indians are of opinion that they kill each other in contending for the females at the rutting season. They are then so jealous of their mistresses, that they run at either man or beast who offers to approach them, and have been seen to run and bellow even at ravens and other large birds which chanced to fly or light near them. They go to rut in August. The females bring forth their young about the latter end of May or beginning of June, and are never known to have more than one at a time. They delight most in the stonniest and mountainous parts of the barren grounds, and are seldom found at any great distance through the woods. Though a beast of considerable magnitude and apparently unwieldy form, yet it climbs the rocks with great ease and agility; and is nearly as sure-footed as a goat, and like that animal will feed on any thing: for though they seem fondest of grass, yet in winter they eat moss and any other herbage they can find; also the tops of the willows and the brush of the pine-tree. The flesh of this animal no ways resembles that of the western buffalo; but is more like that of the moose or elk, the fat being of a clear white slightly tinged with a light azure. The calves and young heifers are exceeding good eating; but the flesh of the bulls both smell and taste so strong of musk, as to render it very disagreeable. It seems to have been from want of better information, that Mr Drage asserts the heart to be the most impregnated: had he said the kidneys, he would have been much nearer the truth. The urine must contain this scent in a very great degree: for the penis is always lubricated with a brown gummy substance, so highly scented with musk, that after having been kept for several years it does not seem to have lost any of its quality. The dung of this animal (though so large) is all in little round knobs; and so exactly like that of the varying hare both in size and colour, that it would be very easy to mistake the one for the other, were it not for the quantity. The Indians kill great numbers of them. From 2000 to 4000 weight of the flesh frozen is brought to Prince of Wales's fort annually, and is served out as provisions to the Europeans. See the figures, Plate CI.

b, The *Cape Buffalo*, or Bos Caffer of Sparrman, another variety, inhabits the interior parts of Africa north of the Cape of Good Hope, but does not extend to the north of the Tropic. They are said to be greatly superior

Bos.

in size to the largest English ox: hang their heads down, and have a most ferocious and malevolent appearance. They are in fact excessively fierce and dangerous to travellers; will lie quietly in wait in the woods, and rush suddenly on passengers, and trample them, their horses, and oxen of draught, under their feet: so that they are to be shunned as the most cruel beasts of this country. They will even return to the attack, and delight to lick the slaughtered bodies. They are prodigiously swift, and so strong, that a young one of three years of age, being placed with six tame oxen in a waggon, could not by their united force be moved from the spot. They are also found in the interior parts of Guinea; but are so fierce and dangerous, that the negroes who are in chase of other animals are fearful of shooting at them. The lion, which can break the back of the strongest domestic oxen at one blow, cannot kill this species, except by leaping on its back, and suffocating it by fixing its talons about its nose and mouth. The lion often perishes in the attempt; but leaves the marks of its fury about the mouth and nose of the beast. They live in great herds, especially in Krake-Kamma, and other deserts of the Cape; and retire during the day into the thick forests. They are reckoned good meat by the Dutch of the Cape. They are called *Aurochs*, but differ totally from the European. The warmth of the climate has prevented the vast length and abundance of hair which distinguishes the former, and the luxuriance of herbage in this country has given it the vast superiority of size.

Of this animal we have the following account by Dr Sparrman, who was the first who gave a distinct delineation and description of it. Describing the death of one that was shot, he informs us, that "immediately after the report of the gun, the buffalo fell upon its knees: that he afterwards, however, raised himself up, and ran seven or eight hundred paces into a thicket; and directly upon this, with a most dreadful bellowing, gave us to understand, that it was all over with him. All this together formed a spectacle, which most sportsmen would have been highly delighted to have been present at. This creature, as well as most of the larger kind of game, was shot by a Hottentot. Even some of the best huntsmen among the farmers are obliged, for the most part, to make use of Hottentots by way of bush-hunters; as in their skin cloaks they do not excite the attention of the wild beasts so much as the Europeans do in their dress. They are likewise ready at any time when there is occasion for it, to go barefoot, and crawl softly upon their bellies, till they come within a proper distance of the animal. Moreover, when the buffalo at length is irritated, the Hottentots can much easier escape from the danger which threatens them than a Christian. I myself, on another occasion, saw two Hottentots run with amazing swiftness when a buffalo was in pursuit of them. It was not without the greatest discontent on the part of my Hottentots that I made a draught and took the dimensions of this buffalo; thus preventing them, in the mean while, from falling aboard of the flesh. Neither did they afterwards delay one moment to cut a few slices off and broil them. They likewise laid two bones on the fire to broil, for the sake of the marrow. After this they began to take out the entrails, which, according to the testimony of my

Hottentots, perfectly resembled those of an ox: the buffalo's, however, are much larger, and take up more room, and indeed gave us no little trouble in clearing them away; for the diameter of this creature's body was full three feet.

"Upon the whole, the size of the buffalo was as follows: the length eight feet, the height five and a half, and the fore legs two feet and a half long; the larger hoofs were five inches over; from the tip of the muzzle to the horns was twenty-two inches. This animal in shape, as may be seen in the plate, very much resembled the common ox; but the buffalo has much stouter limbs, in proportion to its height and length. Their fetlocks hang likewise nearer to the ground. The horns are singular, both in their form and position: the bases of them are 13 inches broad, and are only an inch distance from each other; by which means, there is formed between them a narrow channel or furrow, in a great measure bare of hair. Measuring them from this furrow, the horns rise up in a spherical form, with an elevation of three inches at most. In this way they extend over a great part of the head, viz. from the nape of the neck to the distance of three and a half inches from the eyes; so that the part from which they grow out, does not occupy a space of less than 18 or 20 inches in circumference. From hence bending down on each side of the neck, and becoming more cylindrical by degrees, they each of them form a curve, the convex part of which is turned towards the ground, and the point up in the air; which, however, at the same time is generally inclined backwards. The distance between the points of the horns is frequently above five feet; the colour of them is black; and the surface, to within about a third part of them, measured from the base, is very rough and craggy, with cavities sometimes an inch deep. Neither these cavities, nor the elevations which are formed between them, appear to be at all accidental, as there is a tolerable similarity between these excrescences, though they are very different in different buffaloes. The ears are a foot in length, somewhat pendant, and in a great measure covered and defended by the lower edges of the horns. The edges of the ears are notched and shrivelled up in divers ways, which probably proceeds from the wounds these creatures frequently receive in their battles with each other, and from the rents they get in the briars and almost impenetrable thickets through which they pass, together with other casualties of that nature: Though several Hottentots have been induced from thence to imagine, that the buffaloes belonged to certain supernatural beings, who marked these animals in this manner for their own cattle. By way of naming these beings to me, they made use of the word *duyvel*, which means devil.

"The hairs of the buffalo are of a dark brown colour, about an inch long; harsh; and on such males as are advanced in years, very thin, especially on the middle of the sides of the belly: hence they appear at some distance as if they were girt with a belt; and what contributes not a little to this appearance is, that the buffaloes in general are very fond of rolling in the mire. The hairs on the knees are in most buffaloes somewhat longer than those on the rest of the body, and lie as it were in whirls. The eyes are somewhat sunk.

Bos.

Plate CL

Bos.

funk within their prominent orbits. This, together with the near situation of them to the bases of the horns, which hang somewhat over its pendant dangling ears, and its usual method of holding its head inclined to one side, gives the buffalo a fierce and treacherous aspect. The disposition likewise of the animal seems to correspond with its countenance. He may in some sort be called treacherous, as he is wont to hide himself among the trees, and stand there skulking till somebody happens to come very near him, when he rushes out at once into the road, and attacks them. This animal likewise deserves the appellation of fierce and cruel; as it has been remarked, that, not content with throwing down and killing the person whom he attacks, he stands over him afterwards, in order to trample upon him with his hoofs and heels, at the same time crushing him with his knees, and with his horns and teeth tearing to pieces and mangling the whole body, and stripping off the skin by licking it with his tongue. This, however, he does not do all at once, but at intervals, going away between whiles to some distance off. Notwithstanding all this, the buffalo will bear to be hunted; though sometimes he will turn and hunt his pursuer, whose only dependence in that case is upon the swiftness of his steed. The surest way to escape from him is to ride up some hill, as the great bulk of the buffalo's body, like that of the elephant, is a weight sufficient to prevent him from being able to vie with the slender and fine limbed horse in swiftness; though, on the other hand, the buffalo, in going down hill, gets on much faster than the horse; a fact to which I have more than once been an eye-witness.

"The flesh of the buffalo is coarse and not very fat, but full of juice, and of a high and not disagreeable flavour. The hide is thick and tough, and is in great request with the farmers for thongs and harnesses. Of it we made the only halters that can be depended upon for securing our horses and oxen; so that these beasts cannot get loose by snapping them asunder, which they are otherwise apt to do when the lions and wolves make their appearance in the neighbourhood. Every such halter should be a finger and a half in breadth and about three yards long, and are sold a good way up in the country for a quarter of a rixdollar a-piece.

"The hide of the buffalo we had now shot, after it had been dressed in some sort by my Hottentots, by being stretched out and salted a little, and afterwards half dried, served to make a pair of new four-plaited traces for my waggon. We observed, that the ball had hit the lower part of the neck, and entered the lungs; where, though it did not seem to have struck against any bone, and though it was alloyed with the usual quantity of tin, it was yet found to be pretty much flattened. In other buffaloes that we shot since, I have sometimes found the balls, though alloyed with tin, shivered into several pieces against the bones in the internal parts, or at least very much flattened. It is not, therefore, worth while to set about shooting the buffalo with balls made of lead only, for they will seldom be able to penetrate into those parts where they are likely to prove mortal. Besides being possessed of the degree of hardness requisite, a ball should be of a tolerable size, in order to kill so large an animal as the

buffalo. The least that ought to be used for this purpose should weigh two ounces and a quarter.

"My Hottentots showed so much diligence and zeal both in cutting up and eating this beast, that the encouragement and stimulation which is otherwise frequently necessary to set their sluggish and heavy souls in motion, would on this occasion have been quite superfluous. They drove the waggon then up to the place where the beast lay, and loaded it with the best and fattest part of the flesh. The raw hide, which was of considerable weight and extent, was tied under the waggon till it should be wanted, and the two remaining legs or marrow-bones were fastened to each side of the body of the waggon. Notwithstanding this, our Boshies-men had each of them loaded themselves with a quantity of slips of flesh made up into bundles. Thus covered up to the eyes and ears in meat, we made a singular appearance, which might have given any traveller who had happened to pass that way the idea of a walking flesh-market. As we proceeded on our journey, a swarm of other carnivorous animals in a considerable number, viz. eagles, falcons, and common hawks, were seen soon afterwards to occupy our places about the buffalo's remains; though we saw none of them either in the trees or flying about in the air till we had got to the distance of a few gun-shots from the spot."

Another hunt of this formidable animal he afterwards describes as follows: "There was now again a great scarcity of meat in the waggon; for which reason my Hottentots began to grumble, and reminded me that we ought not to waste so much of our time in looking after insects and plants, but give a better look out after the game. At the same time they pointed to a neighbouring dale over-run with wood, at the upper edge of which, at the distance of a mile and a quarter from the spot where we then were, they had seen several buffaloes. Accordingly we went thither; but though our fatigue was lessened by our Hottentots carrying our guns for us up a hill, yet we were quite out of breath and overcome by the heat of the sun before we got up to it. Yet, what even now appears to me a matter of wonder is, that as soon as we had got a glimpse of the game, all this languor left us in an instant. In fact, we each of us strove to fire before the other, so that we seemed entirely to have lost sight of all prudence and caution. When we advanced to within twenty or thirty paces of the beast, and consequently were perhaps likewise in some degree actuated by our fears, we discharged our pieces pretty nearly at the same time; while the buffalo, which was upon rather lower ground than we were, behind a thin scrambling bush, seemed to turn his head round in order to make towards us. In the mean while, however, the moment we had discharged our guns, we had the pleasure to see him fall, and directly afterwards run down into the thickest part of the wood. This induced us to hope that our shot had proved mortal; for which reason, we had the imprudence to follow him down into the close thickets, where luckily for us we could get no farther. We had, however, as we found afterwards, only hit the hindmost part of the chine, where the balls, which lay at the distance of three inches from each other, had been shivered to pieces against the bones. In the

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mean while our temerity, which chiefly proceeded from hurry and ignorance, was considered by the Hottentots as a proof of spirit and intrepidity hardly to be equalled; on which account, from that instant they ever after appeared to entertain an infinitely higher opinion of our courage than they had ever done before. Several of our Hottentots now came to us, and threw stones down into the dale, though without success, in order to find out by the bellowings of the beast whither he had retired: afterwards, however, he seemed to have plucked up his courage; for he came up at last out of the dale of his own accord to the skirts of the wood, and placed himself so as to have a full view of us on the spot where we were resting ourselves somewhat higher up: his intention was, in all probability, and in the opinion of our old sportsmen, to revenge himself on us, if we had not happened to see him in time, and fired at him directly. What, perhaps, in some measure put a stop to his boldness was, that we stood on higher ground than he did: for several veteran sportsmen have assured me of it as a fact, that they know from experience, that the buffaloes do not willingly venture to ascend any hill or eminence in order to attack any one. The third shot, which afterwards was observed to have entered at the belly, was fatal. This occasioned the buffalo to take himself down again into the vale, dyeing the ground and bushes all the way he went with his blood. Though still hot upon the chase, yet we advanced with the greatest caution, accompanied by two of our Hottentots, thro' the thin and more pervious part of the wood, where the buffalo had taken refuge. He was advancing again in order to attack some of us, when Mr Immelman, from the place where he was posted, shot him in the lungs. Notwithstanding this, he had still strength enough left to make a circuit of a hundred and fifty paces, before we heard him fall: during his fall, and before he died, he bellowed in a most stupendous manner; and this death-song of his inspired every one of us with joy, on account of the victory we had gained: and so thoroughly steeled is frequently the human heart against the sufferings of the brute creation, that we hastened forwards, in order to enjoy the pleasure of seeing the buffalo struggle with the pangs of death. I happened to be the foremost amongst them; but think it impossible for anguish, accompanied by a savage fierceness, to be painted in stronger colours than they were in the countenance of this buffalo. I was within ten steps of him when he perceived me, and bellowing raised himself suddenly again on his legs. I had reason to believe since, that I was at the time very much frightened; for before I could well take my aim, I fired off my gun, and the shot missed the whole of his huge body, and only hit him in the hind legs, as we afterwards discovered by the size of the balls. Immediately upon this I flew away like lightning, in order to look out for some tree to climb up into. Notwithstanding the tedious prolixity it might occasion me to be guilty of, I thought the best and readiest method of giving my reader an idea of the nature of this animal, and of the method of hunting it, as well as of other contingent circumstances, would be to adduce an instance or two of what occurred during the chase. My Hottentots cut up the buffalo with their usual alacrity and ardour; but as they had a great way to

carry the flesh to the waggon, they took it thither in a rather unusual way. This was as follows: they cut out large slips of flesh, whole and entire, with holes in the middle, wide enough for them to put their heads and arms through, and loaded themselves with it in this manner before, behind, and on every side of them; the meat all the while dangling about their bodies in a manner ludicrous enough, though not much adapted to create an appetite in the spectator. In this way their hands being entirely disengaged, excepting that each man carried a stick, they clambered up the brow of the hill that overhung the vale, and thus walked on towards the waggon, whither one might trace them all the way by the blood."

IV. The GRUNNIENS, or hog-cow, has cylindrical horns bent backwards. The body is so hairy, that the hair hangs down upon its knees like a goat. The colour of the body is black, but the front is white. It has bristles on its back, tail, and hind-legs, and it grunts like an hog. It is an inhabitant of the north of Asia.

a, A variety of this species is the *Indian ox*, with a vast hump on the shoulders. They differ much in size and in the form of their horns. Some are very large, and of a reddish colour; with horns short, and bending close to the neck; others very small, with horns almost upright, bending a little forward. In Surat is a minute kind not bigger than a great dog, which have a very fierce look, and are used to draw children in small carts. In Celebes is a small species not bigger than a middle sized sheep, called *Anoa*, very fierce and wild, of a dark ash-colour, inhabiting the rocks. Mr Loten, when in India, put some of them into a paddock, and in one night's time they killed 14 or 15 of his deer by ripping up their bellies.

V. The BUBALUS, or common buffalo, has large black horns bent backward and inward, and plain before. The hair on the back is very hard, but thinly scattered over the body. It is a native of Asia; but they are tamed in Italy, and used for the same purposes as black cattle in other countries. They draw carriages, and are guided by a rope tied to a string thrust through their noses. This buffalo is larger than an ox, has a thicker body, and a very hard hide. His pace is slow; but he will carry a great burden. They feed in herds like cows; and yield plenty of milk, of which very good butter and cheese is made. Their flesh is pretty good, but not to be compared to beef. The wild buffalo is a very fierce and dangerous animal; he often attacks travellers, and tears them in pieces. However, they are not so much to be feared in woods as in the plains, because their horns, which are sometimes ten feet long, are apt to be entangled in the branches of trees, which gives those who are surprised by them time to escape. They are excellent swimmers, and will cross the largest rivers without any difficulty. They run wild in great troops on the coast of Malabar; for which reason strangers are allowed to hunt and kill them at pleasure.

VI. The INDICUS, or little Indian buffalo, has horns shorter than its ears, a bunch on its back, and no mane. It is about the size of a calf six months old, and used in the East Indies for drawing coaches.

BOS, in antiquity, was peculiarly used for an ancient Greek silver coin, which was *didrachmus*, or equivalent to two drachms. It was so called as having on it the

Bos.

Bofa
Boscawen.

the impression of an ox, and chiefly obtained among the Athenians and Delians; being sometimes also struck of gold. From this arose the phrase *Bos in lingua*, applied to those who had taken bribes to hold their tongue.

BOSA, a maritime town in the western part of the island of Sardinia, with a castle, a good port, and a bishop's see. It is seated on the river Bofa, to the north-east of an island of the same name; and has good salt-pits. E. Long. 8. 30. N. Lat. 40. 19.

BOSCAGE, the same with a grove or thicket.

BOSCAGE, in a law sense, is that food which trees yield to cattle; as mast, &c. But Manhood says, to be quit of Boscage is to be discharged of paying any duty for windfall wood in the forest.

BOSCAGE, among painters, denotes a landscape representing much wood and trees.

BOSCAN (John), a Spanish poet of the 16th century, born at Barcelona. He was the friend of Garcilasso de Viga, another Spanish poet. These two were the first who made any great improvement in the poetry of their nation, and their pieces were printed together. Boscan, who died about the year 1542, principally succeeded in sonnets.

BOSCAWEN (Edward), a brave British admiral, was the second son of Hugh late lord viscount Falmouth. Having early entered into the navy, he was, in 1740, captain of the Shoreham; and behaved with great intrepidity as a volunteer under admiral Vernon, at the taking of Porto Bello. At the siege of Carthage, in March 1740-1, he had the command of a party of seamen who resolutely attacked and took a battery of 15 twenty-four pounders, though exposed to the fire of another fort of five guns. Lord Aubrey Beauclerk being killed at the attack of Boca-Chica, captain Boscawen succeeded him in the command of the prince Frederic of 70 guns. In May 1742, he returned to England, and married Frances daughter of William Glanville, Esq; and the same year was elected representative for Truro in Cornwall. In 1744, he was made captain of the Dreadnought of 60 guns; and soon after he took the Media, a French man of war commanded by M. Hoquart, the first king's ship taken in that war. May 3. 1747, he signalized himself under the admirals Anson and Warren, in an engagement with the French fleet off Cape Finisterre, and was wounded in the shoulder with a musket ball. Here M. Hoquart, who then commanded the Diamond of 56 guns, again became his prisoner; and all the French ships of war, which were ten in number, were taken. On the 15th of July he was made rear-admiral of the blue, and commander in chief of the land and sea forces employed on an expedition to the East Indies; and, on the 4th of November, sailed from St Helen's, with six ships of the line, five frigates, and 2000 soldiers. On the 29th of July 1748, he arrived at St David's, and soon after laid siege to Pondicherry; but the men growing sickly, and the monsoons being expected, the siege was raised, and Mr Boscawen showed himself as much the general as the admiral in his retreat. Soon after he had news of the peace, and Madras was delivered up to him by the French. In April 1750, he arrived at St Helen's in the Exeter, and found that in his absence he had been appointed rear-

admiral of the white. He was the next year made one of the lords commissioners of the admiralty, and chosen an elder brother of the Trinity-house. In February 1755, he was appointed vice-admiral of the blue. On the 19th of April, sailing in order to intercept a French squadron bound to North America, he fell in with the Alcide and Leys of 64 guns each, which were both taken: on this occasion M. Hoquart became his prisoner a third time, and he returned to Spithead with his prizes and 1500 prisoners. In 1756, he was appointed vice admiral of the white; and in 1758, admiral of the blue, and commander in chief of the expedition to Cape Breton; when, in conjunction with general Amherst, and a body of troops from New England, the important fortress of Louisbourg and the whole island of Cape Breton was taken, for which he afterwards received the thanks of the House of Commons. In 1759, being appointed to command in the Mediterranean, he arrived at Gibraltar, where hearing that the Toulon fleet, under M. de la Clue, had passed the Straits, in order to join that at Brest, he got under sail, and on the 18th of August saw, pursued, and engaged the enemy. His ship, the Namur of 90 guns, losing her main-mast, he shifted his flag to the Newark; and, after a sharp engagement, took three large ships, and burnt two in Lagos-bay, and the same year arrived at Spithead with his prizes and 2000 prisoners. On December 8. 1760, he was appointed general of the marines with a salary of L. 3000 *per annum*, and was also sworn one of the privy-council. He died in 1761.

BOSCH (Jacob Vanden), a painter of still life, was born at Amsterdam in 1636, and painted summer fruits of various kinds, peaches, pears, apples, plums, nectarines, and cherries, with extraordinary neatness of pencil. He painted all his objects after nature, and imitated every sort of fruit with so great truth and delicacy, with such natural and transparent colour, that they appeared delicious, and almost real. He died in 1676.

BOSCHAERTS (Thomas Willeborts), a celebrated painter, was born at Bergen-op-zoom; and, like the great painters who flourished at that time, began to draw, when very young, in the books that were intended for other studies. Preferring his pencil to every thing else, he drew his own picture, by his resemblance in a looking-glass, so like, that those who saw it were astonished. This he did before he had the least instruction from any one, and when he was only 12 years of age. Upon this his parents sent him to a master, that he might follow the bent of his genius; but his first master being only an indifferent painter, and incapable of satisfying his earnest desire of learning, he left him, and engaged himself with Gerard Segers; under whom, after four years practice, he proved a most accomplished artist. Antwerp being at that time the seat of arts, where there was a confux of the most eminent painters, he thought it the fittest place for his improvement; and there executed such a number of noble pieces as added greatly to the splendor of that wealthy city. In 1642, Henry Frederick prince of Orange, and his son prince William, employed him in their service; in which he continued several years, and made those excellent pieces that are to be seen in that prince's palace at the Hague and other parts of Holland.

Bosch,
Boschaerts.

Bosco
Boshies-
men.

Holland, and painted portraits for most of the persons of quality that were then living. He died in the flower of his age, in 1670.

BOSCO, or BOSCHI, a town of Italy, in the Milanese, seated on the river Orbe. E. Long. 9. 44. N. Lat. 44. 53.

BOSCOI, or BOSCI, in ecclesiastical history, denotes a species or tribe of monks in Palestine, who fed on grass like the beasts of the field. The word is Greek, βοσχοι, q. d. "grazers;" formed from βοσκα, *pasco*, "I feed." The Boscoi are ranked among the number of Adamites, not so much on account of their habit, as food. They took no care about provision; but when eating-time came, or any of them was hungry, went into the fields, with each his knife in his hand, and gathered and eat what he could find.

BOSEA, GOLDEN-ROD TREE: A genus of the digynia order, belonging to the pentandria class of plants; and in the natural method ranking under the 53d order, *Scabridæ*. The calyx is pentaphyllous; there is no corolla; and the berry is monospermous. Of this genus there is but one species, viz. the yervamora. This is a native of the Canary islands, and also of some of the Caribbees. It hath been long an inhabitant of the British botanic gardens, but hath never been observed to flower in this country. It is a pretty strong woody shrub, growing with a stem as large as a middling person's leg; the branches come out very irregular, and make considerable shoots every summer, which should be shortened in the spring. These branches retain their leaves till towards the spring, when they fall away, and new leaves are produced in their place. It may be propagated by cuttings planted in the spring; and the plants must be housed in winter, for they are too tender to bear the open air at that season of the year.

BOSHIES-MEN, a species of Hottentots, so called, according to Dr Sparrman, from their dwelling in woody or mountainous places. They are sworn enemies to a pastoral life. Some of their maxims are, to live on hunting and plunder, and never to keep any animal alive for the space of one night. By this means they render themselves odious to the rest of the inhabitants of the Cape; and are pursued and exterminated like the wild beasts, whose manners they have assumed. Others of them again are kept alive, and made slaves of. Their weapons are poisoned arrows, which shot out of a small bow will fly to the distance of 200 paces, and will hit a mark with a tolerable degree of certainty at the distance of 50 or even 100 paces. From this distance they can by stealth, as it were, convey death to the game they hunt for food, as well as to their foes, and even to so large and tremendous a beast as the lion; this noble animal thus falling by a weapon which perhaps it despised, or even did not take notice of. The Hottentot, in the mean time, concealed and safe in his ambush, is absolutely certain of the operation of his poison, which he always culls of the most virulent kind; and it is said he has only to wait a few minutes in order to see the wild beast languish and die. The dwellings of these foes to a pastoral life are generally not more agreeable than their maxims and manners. Like the wild beasts, bushes and clefts in rocks by turns serve them instead of houses; and some of them are said to be so far worse than beasts, that their

soil has been found close by their habitations. A great many of them are entirely naked; but such as have been able to procure the skin of any sort of animal, great or small, cover their bodies with it from the shoulders downwards as far as it will reach, wearing it till it falls off their backs in rags. As ignorant of agriculture as apes and monkeys, like them they are obliged to wander about over hills and dales after certain wild roots, berries, and plants (which they eat raw), in order to sustain a life that this miserable food would soon extinguish and destroy were they used to better fare. Their table, however, is sometimes composed of several other dishes, among which may be reckoned the larvæ of insects, or that kind of caterpillars from which butterflies are generated; and in like manner a sort of white ants (the *termes*), grasshoppers, snakes, and some sorts of spiders. With all these changes of diet, the Boshies-man is nevertheless frequently in want, and famished to such a degree as to waste almost to a shadow. "It was with no small astonishment (says Dr Sparrman), that I for the first time saw in Lange Kloof a lad belonging to this race of men with his face, arms, legs, and body, so monstrously small and withered, that I could not have been induced to suppose but that he had been brought to that state by the fever that was epidemic in those parts, had I not seen him at the same time run like a lapwing. It required but a few weeks to bring one of these starvelings to a thriving state, and even to make him fat; their stomachs being strong enough to digest the great quantity of food with which they are crammed, as they may rather be said to bolt than eat. It sometimes happens indeed that they cannot long retain what they have taken in; but this circumstance, it is said, does not hinder them from beginning again upon a new score."

The capture of slaves from among this race of men is by no means difficult; and is effected (Dr Sparrman informs us) in the following manner. "Several farmers that are in want of servants join together and take a journey to that part of the country where the Boshies-men live. They themselves, as well as their Lego-Hottentots, or else such Boshies-men as have been caught some time before, and have been trained up to fidelity in their service, endeavour to spy out where the wild Boshies-men have their haunts. This is best discovered by the smoke of their fires. They are found in societies from 10 to 15 and 100, reckoning great and small together. Notwithstanding this, the farmers will venture in a dark night to set upon them with six or eight people, which they contrive to do by previously stationing themselves at some distance round about the craal. They then give the alarm by firing a gun or two. By this means there is such a consternation spread over the whole body of these savages, that it is only the most bold and intelligent among them that have the courage to break through the circle and steal off. These the captors are glad enough to get rid of at so easy a rate; being better pleased with those that are stupid, timorous, and struck with amazement, and who consequently allow themselves to be taken and carried into bondage. They are however, at first treated by gentle methods; that is, the victors intermix the fairest promises with their threats, and endeavour, if possible, to shoot some of the

Boshies-
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Boshies-
men.

the larger kinds of game for their prisoners, such as buffaloes, sea-cows, and the like. Such agreeable baits, together with a little tobacco, soon induce them, continually cockered and feasted as they are, to go with a tolerable degree of cheerfulness to the colonist's place of abode. There this luxurious junketting upon meat and fat is exchanged for more moderate portions, consisting for the most part of butter-milk, frumenty, and hasty-pudding. This diet, nevertheless, makes the Boshies-man fat in a few weeks. However, he soon finds his good living embittered by the maundering and grumbling of his master and mistress. The words *t'guzeri* and *t'gaunatsi*, which perhaps are best translated by those of "young forcerer" and "imp," are expressions which he must frequently put up with, and sometimes a few curses and blows into the bargain; and this for neglect, remissness, or idleness: which last failure, if it cannot be said to be born with him, is however in a manner naturalized in him. So that, both by nature and custom detesting all manner of labour, and now from his greater corpulency becoming still more slothful, and having besides been used to a wandering life subject to no controul, he most sensibly feels the want of his liberty. No wonder, then, that he generally endeavours to regain it by making his escape: but what is really a subject for wonder is, that when one of these poor devils run away from his service, or more properly bondage, he never takes with him any thing that does not belong to him. This is an instance of moderation in the savages towards their tyrants which is universally attested, and at the same time praised and admired by the colonists themselves; which, however, I cannot easily reconcile with what I have learned of the human heart. Is it in consequence of their fearing to meet with harder usage in case they should be retaken? This far, however, is certain, that none of this species of Hottentots are much given to violence or revenge. Free from many wants and desires that torment the rest of mankind, they are little, if at all, addicted to thieving, if we except brandy, victuals, and tobacco. It is not improbable likewise, that the advantages accruing from a theft may be overlooked by them, when their thoughts are taken up with regaining their liberty, the greatest of all treasures. It is necessary to observe here, that some of the Hottentots or Boshies-men, who are thus forced into the service of the colonists, live in small societies peaceably and quietly in desert tracts, where the colonists cannot easily come at them, and are sometimes in the possession of a few cows. These people probably originate from Boshies-men who have run away from the colonists service.

"I must confess (continues our author), that the Boshies-men in some husbandmen's service are treated in the gentlest manner, and perhaps even without ever having a harsh word given them; live very well with regard to provisions; are well clad, relatively to their condition in life; and are very comfortably lodged, in comparison of what others are, in their own straw cottages. The chief of their business perhaps consists in tending a herd of cattle or flock of sheep during the heat of the day, when they have an opportunity of getting into a gentle state of intoxication by smoking tobacco; a state which excites in them sensations

of as agreeable a nature as the frenzy produced by spirituous liquors and opium seems to afford to many others, who are never at ease but when they can procure to themselves this delicious pleasure. And yet, though they may thus agreeably pass away the otherwise tedious hours of their lives in smoking and sleep, they nevertheless generally run away. The colonists wonder at this, as a procedure entirely devoid of reason; without perceiving, that in so doing they suppose the Hottentots not endued with a desire, which has its immediate foundation in nature, and which is common to the human race, and even to most brute animals, viz. an earnest longing after their birth-place and families, and especially after their liberty.

"The slave business, that violent outrage to the natural rights of mankind, always in itself a crime, and which leads to all manner of misdemeanors and wickedness, is exercised by the colonists in general with a cruelty towards the nation of Boshies-men which merits the abhorrence of every one; though I have been told that they pique themselves upon it: and not only is the capture of those Hottentots considered by them merely as a party of pleasure, but in cold blood they destroy the bands which nature has knit between husbands and their wives and children. Not content, for instance, with having torn an unhappy woman from the embraces of her husband, her only protection and comfort, they endeavour all they can, and that chiefly at night, to deprive her likewise of her infants; for it has been observed, that the mothers can seldom persuade themselves to flee from their tender offspring. The amiable tenderness of the mother, which perhaps glows with a more lively flame in the breast of this poor heathen than in those of her Christian tyrants, is the very circumstance laid hold on by their persecutors in order to rivet the chains of this wretched female so much the faster. There are some mothers, however, that set themselves free, when they have lost all hopes of saving their children. After having made their escape, they sometimes keep secretly about the neighbourhood, in hopes of finding some opportunity of recovering their infants again."

BOSNA-SERAGO, a large and strong town of Turkey in Europe, and capital of the province of Bosnia. E. Lon. 18. 57. N. Lat 44. 40.

BOSNIA, a province of Turkey in Europe, seated between Sclavonia and Dalmatia. It belongs entirely to the Turks; but they were on the point of being expelled from it by the Christians, when the Spaniards invaded Sicily, and obliged the emperor to conclude the peace of Passarowitz in 1718, by which he gave up Bosnia to the Turks. It is 200 miles in length, and 75 in breadth. It is a barren country, and but little cultivated: the principal revenue arising chiefly from the silver mines. Among the game there are falcons, which are held in great esteem.

BOSPHORUS, or BOSPORUS, in geography, a long and narrow sea, which it is supposed a bullock may swim over. In a more general sense, it is a long narrow sea running in between two lands, or separating two continents, and by which two seas, or a gulph and a sea, are made to communicate with each other: In which sense, bosphorus amounts to the same with what we otherwise call an arm of the sea, channel, or strait; the:

Bosna

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Bosphorus.

Bosquets the Italians, *faro*; the Latins, *fretum*; and the French, *pas, manche*. The word is Greek, *βοσπορος*, formed from *βος* "bullock," and *πορος* "passage."

Bosliney.

The name *bosphorus*, is chiefly confined to two straits in the Mediterranean sea, viz. the *bosphorus of Thrace*, commonly called the *straits of Constantinople*, or *channel of the Black Sea*; and the *Cimmerian* or *Scythian bosphorus*, so called, it seems, from its resemblance to the Thracian; now more commonly the *straits of Kapha*, or *Kiderleri*, from two cities standing on it.

The origin of the name is better agreed on than the reason why it was first given to the Thracian bosphorus. Nymphius tells us, on the authority of Accarion, that the Phrygians, desiring to pass the Thracian strait, built a vessel, on whose prow was the figure of a bullock; and which was hence called *βος*, "bullock;" and served them for a ferry-boat. Dionysius, Valerius Flaccus, Callimachus, Apollodorus, Marcellinus, &c. say, that Io, being transformed into a cow by Juno, passed this strait swimming, which hence was called *bosphorus*. Arrian tells us, that the Phrygians were enjoined by the oracle, to follow the rout which a bullock should mark out to them; and that, upon stirring one up, it jumped into the sea to avoid their pursuit, and swam over this strait. Others say, that an ox, tormented by a gad-fly, threw itself in, and swam over: and others, that anciently the inhabitants of these coasts, when they would pass over, joined little boats together, and had them drawn over by bullocks, &c.

BOSQUETS, in gardening, groves so called from *boschetto*, an Italian word which signifies a *little wood*. They are compartments in gardens formed by branches of trees disposed either regularly in rows, or wildly and irregularly, according to the fancy of the owner. A bosquet is either a plot of ground inclosed with palisadoes of horn-beam, the middle of it being filled with tall trees, as elm or the like, the tops of which make a tuft or plume; or it consists of only high trees, as horse-chestnut, elm, &c. The ground should be kept very smooth and rolled, or else covered with grass, after the manner of green plots. In planting bosquets, care should be taken to mix the trees which produce their leaves of different shapes, and various shades of green, and hoary or meally leaves, so as to afford an agreeable prospect. Bosquets are only proper for spacious gardens, and require a great expence to keep them up.

BOSSAGE, in architecture, a term used for any stone that has a projecture, and is laid rough in a building, to be afterwards carved into mouldings, capitals, coats of arms, &c. Bossage is also that which is otherwise called *rustic-work*; and consists of stones which advance beyond the naked, or level of the building, by reason of indentures or channels left in the joinings. These are chiefly used in the corners of edifices, and thence called *rustic quoins*. The cavities or indentures are sometimes round, sometimes chain-framed, or bevelled, sometimes in a diamond form, sometimes inclosed with a cavetto, and sometimes with a listel.

BOSSE (Abraham), an able engraver, born at Tours, was well skilled in perspective and architecture. He wrote two treatises, which are esteemed; the one on the manner of designing, and the other upon engraving.

BOSSINEY, or **BOSS-CASTLE**, a town of Corn-

wall, in England, which sends two members to parliament. W. Long. 5. 0. N. Lat. 50. 40.

BOSSU (Rene le), born at Paris in 1631, was admitted a canon regular in the abbey of St Genevieve, in 1649; and after a year's probation, took the habit. He taught polite literature with great success in several religious houses for 12 years, when he gave up the task for retirement. He then published a parallel betwixt the principles of Aristotle's natural philosophy and those of Des Cartes, with a view to reconcile them; which was but indifferently received. His next treatise was on epic poetry; which Boileau declared one of the best compositions on that subject in the French language, and which produced a great friendship between them. He died in 1680, and left a great number of MSS. which are kept in the abbey of St John de Chartres.

BOSSUET (James Benigne), bishop of Meux, was born at Dijon, on the 27th of September, 1627. He distinguished himself by his preaching, and the zeal he discovered in his endeavours to bring over the Protestants of France to the Romish church; by his opposition to Quietism; and by his numerous writings both in French and Latin, which have been collected together, and printed at Paris in 17 vols 4to. This famous divine died at Paris, in 1704, aged 77.

BOSSUPT, a town of the Austrian Netherlands, in the province of Brabant. E. Long. 4. 30. N. Lat. 50. 52.

BOSSUS (Matthew), distinguished by his virtue and his learning, was born in 1427. He devoted himself to the ecclesiastical state in 1451, in the congregation of regular canons of Lateran, and afterwards taught divinity at Padua. His orations, his sermons, and his letters, have been often printed. He also wrote a sort of an apology for Phalaris, and other works. He died at Padua in 1502, aged 75.

BOST, a very strong town of Persia, and capital of the province of Zablestan. E. Long. 64. 15. N. Lat. 31. 50.

BOSTANGIS, in the Turkish affairs, persons employed in the garden of the seraglio, out of whose number are collected those that are to row in the Grand Signior's brigantines, when he has a mind to divert himself with fishing, or to take the air upon the canal. They who row on the left hand are only capable of mean employments in the gardens: but they who row on the right hand may be promoted to the charge of *bostangi-bachi*, who has the general intendency of all the Grand Signior's gardens, and commands above 10,000 *bostangis*.

BOSTON, a corporation-town of Lincolnshire in England, which sends two members to parliament. It is commodiously seated on both sides the river Witham, over which it has a handsome high wooden bridge; and, being near the sea, enjoys a good trade. It has a spacious market-place, and the largest parish church without cross isles in Europe, the steeple of which serves for a land-mark to sailors. Boston is a barony in the Irby family. E. Long. 0. 15. N. Lat. 53. 3.

Boston, the capital of New England in North America, built in 1630, in a peninsula of about four miles in circumference, at the bottom of Massachusetts bay, in a very convenient situation for trade. The following

Bosfu

Boston.

lowing is a description of this capital before the commencement of the present American war. "The town stands in W. Long. 71. 5. N. Lat. 42. 24. about nine miles from the mouth of the bay. At the entrance of this bay are several small rocks which appear above water, and upwards of a dozen of small islands, some of which are inhabited. There is but one safe channel to approach the harbour; and that so narrow, that two ships can hardly sail through abreast; but within the harbour there is room for 500 sail to lie at anchor in a good depth of water. On one of the islands of the bay stands Fort William, the most regular fortress in British America. This castle is defended by 100 guns, 20 of which lie on a platform level with the water, so that it is scarce possible for an enemy to pass the castle. To prevent surprise, they have a guard placed on one of the rocks, at two leagues distance, from whence they make signals to the castle when any ships come near it. There is also a battery of guns at each end of the town. At the bottom of the bay is a noble pier near 2000 feet in length; along which on the north side extends a row of warehouses for the merchants; and to this pier ships of the greatest burden may come and unload without the help of boats. The greatest part of the town lies round the harbour in the form of a half moon, the country beyond it rising gradually and affording a delightful prospect. The neck of land which joins the peninsula to the continent is but 40 yards over; which situation, if properly improved, might render the town impregnable on the land side. Boston contains

only about 18,000 inhabitants. They were more numerous 50 years ago; but the surprising increase of Newbury port, Salem, Marble-head, Cape Ann, Plymouth, Dartmouth, and the island of Nantucket, checked the growth and trade of the capital. The trade of Boston, however, was so considerable, that, in 1768, 1300 sail entered and cleared at the custom-house there. The predominant religion is the Independent; though there are other persuasions, and ten churches serve for them all, but the Independents have six." Boston has frequently suffered by fire, but the houses that were thus destroyed have always been rebuilt to advantage. The late American war began here by the attack at Bunker's-hill, when many brave men lost their lives."

BOSWORTA, a town of Leicestershire in England, situated in W. Long. 1. 24. N. Lat. 52. 25. It has a lofty situation on a hill, and the country about it is fertile in corn and grass. It is memorable for the decisive battle fought near it between Richard III. and the earl of Richard, afterwards Henry III. wherein the former lost his crown and life.

BOTALLUS (Leonard), physician to the duke of Alençon, and to Henry III. was born at Asti in Piedmont. He introduced at Paris the practice of frequent letting of blood; which was condemned by the faculty; but soon after his death it came into practice with all the physicians. He published several books in physic and surgery; and the best edition of his works is that of Leyden in 1660, octavo.

B O T A N Y,

IN the utmost extent of the word, signifies a knowledge of plants, and of the uses to which they may be applied, either in medicine, chemistry, or in the different arts. But as the medical virtues of plants fall properly under the province of the physician, their chemical properties belong to the chemist, &c.; hence the science of botany is commonly restricted to a bare knowledge of the different plants themselves, and of the distinguishing marks whereby each individual species may be known from each other. This knowledge is indispensably necessary for those who propose to apply plants to any useful purpose: for example, though we should suppose a physician ever so well acquainted with the virtues of opium, and a chemist ever so well acquainted with the method of preparing it, yet if both of them were entirely ignorant of botany, so as to be unable to distinguish the particular species of poppy which produces opium from others of the same genus, it is evident their medicinal and chemical skill could be of no use.

The utility of botanical classifications may be further illustrated from the following considerations.

1. With regard to *Food*. Many animals are endowed with an instinctive faculty of distinguishing with certainty whether the food presented to them be salutary or noxious. Mankind have no such instinct. They must have recourse to experience and observation. But they are not sufficient to guide us in every case. The traveller is often allured by the agreeableness of smell and taste to eat poisonous fruits. Neither will a gene-

ral caution, not to eat any thing but what we know from experience to be salutary, answer in every emergency. A ship's company, in want of provisions, may be thrown upon an uninhabited coast or a desert island. Totally ignorant of the nature of the plants they meet with, diseases, or scarcity of animals, may make it absolutely necessary to use vegetable food. The consequence is dreadful: they must first eat before any certain conclusion can be formed. This is not the description of danger arising from an imaginary situation. Before the vegetables that grow in America, the East and West Indies, &c. became familiar to our sailors, many lives were lost by trials of this kind: neither has all the information received from experience been sufficient to prevent individuals from still falling a prey to ignorance or rashness.—If the whole science of botany were as complete as some of its branches, very little skill in it would be sufficient to guard us infallibly from committing such fatal mistakes. There are certain orders and classes which are called *natural*, because every genus and species comprehended under them are not only distinguished by the same characteristic marks, but likewise possess the same qualities, though not in an equal degree. For example: Show a botanist the flower of a plant whose calyx is a double-valved glume, with three stamina, two pistils, and one naked seed; he can pronounce with absolute certainty, that the plant from which the flower was taken, bears seeds of a farinaceous quality, and that they may be safely used as food. In like manner, show him a flower with 12 or more sta-

mina all inserted into the internal side of the calyx, tho' it belonged to a plant growing in Japan, he can pronounce without hesitation, that the fruit of it may be eat with safety. On the other hand, show him a plant whose flower has five stamina, one pistil, one petal, or flower-leaf, and whose fruit is of the berry kind, he will tell you to abstain from it, because it is poisonous. Facts of this kind render botany not only a respectable, but a most interesting, science.

2. With respect to *Medicine*, the same thing holds good. It is found by experience, that plants which are distinguished by the same characters in the flower and fruit have the same qualities, though not always in an equal degree as to strength or weakness; so that, upon inspection of the flower and fruit, a botanist can determine *à priori* the effects that will result when taken into the stomach. In order, therefore, to determine the medical virtues of all the plants belonging to a natural class, the physician has nothing to do but to ascertain by a set of clear and unquestionable experiments, the virtues of any one of them. This greatly shortens the labour of investigation. Supposing the number of known species to be 20,000; by ascertaining the virtues of one genus, at a medium, you determine the number of 12 species. But by ascertaining the virtues of one genus belonging to a natural order, the virtues of perhaps 300 or 400 species are ascertained.

SECT. I. *History of Botany.*

THE origin of this science, like that of most others, cannot be found out from the most ancient histories; but it is very probable, that some degree of botanical knowledge has existed in every age of the world. The first botanical writings of which we have any account are those of Solomon, who we are informed by scripture wrote a treatise upon this subject; which, however, is absolutely lost, not being quoted by any ancient author, nor the least fragment of it remaining. Among the Greeks, Anaxagoras, Pythagoras, and other ancient philosophers, wrote treatises on plants; but their works are also lost; and from the quotations that yet remain in the works of Theophrastus, Dioscorides, and Pliny, we learn, that those first botanical writings could convey but very little advantage.

The historical æra of botany, therefore, commences with Theophrastus the disciple of Aristotle. He was born at Eresium, in the island of Lesbos; and flourished in the third century before the Christian æra, being about 100 years posterior to Hippocrates. His work is intitled *The History of Plants*, and treats of their origin, propagation, anatomy, and construction; of vegetable life, and of vegetation. It consisted originally of ten books; but of which only nine are now extant. In these, vegetables are distributed into seven classes or primary divisions: which have for their object, the generation of plants; their place of growth; their size, as trees and shrubs; their use, as pot-herbs and esculent grains; and their lactescence, or the liquor, of whatever colour, that flows from plants when cut. In his work, about 500 different plants are described.

The next botanist of any note was Dioscorides, a Grecian by birth, but under the Roman empire, being near 300 years posterior to Theophrastus. He de-

scribes about 600 plants: and these he has arranged, from their uses in medicine and domestic œconomy, into four classes, which are thus designed: aromatics; alimentary vegetables, or such as serve for food; medicinal, and vinous plants.

Almost cotemporary with Dioscorides flourished Antonius Eusa, Cato, Varro, Virgil, and Columella; the first, author of a treatise still extant on the plant *betony*; the four others celebrated for their useful tracts on agriculture and rural œconomy.

Pliny the Elder, in his voluminous work intitled *The History of the World*, hath a botanical part which is contained in 15 books. In these, besides the plants of Theophrastus and Dioscorides, he has given descriptions of several new species, extracted probably from works which would otherwise have been totally lost. Pliny uses scarce any mode of arrangement, except the ancient, but very incorrect, distinction into trees, shrubs, and herbs. His plan, however, extends not only to botanical distinctions, but to gardening, agriculture, and whatever is connected either more nearly or remotely with the science of plants. He gives descriptions of above 1000 different species; but from the want of a proper systematic arrangement, it is often difficult, and perhaps impossible, to determine what plants he or other ancient botanists do really describe.

This want of precision in properly arranging their plants was the reason why the botany of the ancients was always very limited, and after the time of Pliny declined so rapidly. On the destruction of the western empire by the Goths and other barbarous nations, it is not to be thought that botany could survive any more than the other sciences. It was not till near the close of the eighth century, that the ancient botany began again to appear in America. Serapion, well known in medicine, stands first in the Arabian catalogue of botanists; to him succeeded Razis, Avicenna, Averrhoes, Actuarius, &c. An author known by the name of *Plato Apuleius*, or *Apoliensis*, of whose *Herbarium* very old manuscript copies are preserved in some curious libraries, is supposed to have lived near this period. The works of most of these botanists, however, were only translations and compilations from the Greek writers; so that, for want of a proper systematic arrangement, the science sunk a second time into total oblivion. For near 400 years after Abenguesit, an Arabian physician who flourished in the end of the 12th century, scarce any attempts were made in the botanical way. Some obscure writers indeed appeared in several parts of Europe; as Arnoldus de Villa Nova; Platearius; Mattheus Sylvaticus; and Bartholomew Glanvil, commonly called *Bartholomeus Anglus*; a Franciscan monk, descended of a family of the Earls of Suffolk, who lived in the reign of king Edward III. and wrote a book of natural history, intitled *De proprietatibus rerum*, which was translated into English by John de Trevisa in 1398: but though all these wrote of plants, they were so totally destitute of method, that their works remain one great chaos, from whence it is impossible to extract any thing intelligible.

On the revival of letters in the beginning of the 16th century, the botany of the ancients was restored a second time. The Greek writings were translated into Latin, the common language of Europe. Gaza, a Greek refugee at Rome, made elegant translations of Aristotle.

Aristotle and Theophrastus, who afterwards were commented upon by Scaliger and Stapel. Dioscorides was also translated and commented on. His best commentators are Hermolaus Barbarus, Fuchsius, Ruellus Cordus, Gesner, and Matthioli. The most distinguished commentaries of Pliny are Dalechamp in 1604, Salmasius in 1689, Harduin and Guilandinus. Meur-fius and Urfinus have written commentaries upon Cato; Campegius and Monardes upon Mesue the Arabian, and Lonicer upon Avicenna. This last hath been translated by several writers, particularly Alpagus, Costæus, and Plempius, into Latin; and by one writer, Amalthæus, into Hebrew.

Hieronymus Bock, or Bouc, a German, generally known by the name of *Tragus*, is the first modern who has given a methodical distribution of vegetables. In 1532, he published a History of Plants, in which he describes 800 species; and these he divides into three classes, founded on the qualities of vegetables, their figure, habit, and size. The same method of arrangement was followed by Lonicer, Dodonæus, L'Obel, Clusius, Brunsfelsius, Monardes, Cordus, and some other botanists of this period. How far such a method was deficient, shall be considered in the following section; however, it was not till 1560 that Conrad Gesner first proposed to the world an arrangement of vegetables from the parts of the flower and fruit. He did not establish any plan founded upon this principle; but, having suggested the idea, left the application to be made by others: and in 1582, Dr Andrew Cæsalpinus, physician at Pisa, and afterwards professor of botany at Padua, first availing himself of the ingenuity of his predecessor, proposed a method of arrangement which has the fruit for its basis; and thus gave origin to systematic botany, the second grand æra in the history of that science.

Even this improved method of Cæsalpinus was not without very great inconveniences, which shall be taken notice of hereafter. As it was, however, so greatly superior to every thing that had happened before, it might have been expected that the learned would have immediately adopted it, and that all the former equivocal and insufficient characters would have been rejected. But the fact was otherwise. Cæsalpinus's method of arrangement died with him; and it was not till near a century after, that Dr Robert Morison of Aberdeen, attaching himself to the principles of Gesner and Cæsalpinus, re-established scientific arrangement upon a solid foundation; so that, from being only the restorer of system, he has been generally celebrated as its founder. In the long interval between Cæsalpinus and Morison flourished some eminent botanists. The most noted are, Dalechamp, author of *A general History of Plants*; Theodore, surnamed *Tabernæmontanus*, and Thalius, two German writers; Porta, an Italian, famous for an arrangement of plants from their relations to the stars, to men, and other animals; Prosper Alpinus, author of a Catalogue of the plants of Egypt; Fabius Columna, inventor of many of the botanical terms now used; the two Bauhins; Gerard, and Parkinson; Zaluzianski, a Pole, author of an arrangement from the qualities and habit of plants; Marcgrave and Piso, celebrated for their Natural History of Brazil; Hernandez, equally celebrated for his History of Mexi-

co; Passæus, or Du Pas, author of an arrangement of plants from the time of flowering, of all characters the most uncertain and insufficient; Johnston; Bontius, a Dutchman, author of a Natural History of the East Indies; Aldrovandus, the celebrated naturalist; and Rheede, governor of Malabar, and author of the well-known *Hortus Malabaricus*.

The method proposed by Morison has the fruit for its basis, as well as that of Cæsalpinus; to which, however, it is greatly inferior both in the plan and execution. It is indeed of all others the most difficult in practice; and was therefore not adopted by any succeeding writer, except Bobart, who in 1699 completed Morison's Universal History of Plants, and an anonymous author whose work appeared in 1720. Imperfect, however, as his method is, it furnished many useful hints, which succeeding botanists have not failed to improve. Ray and Tournefort have owed him much, and are not ashamed to own the obligation. The same has been done even by Linnæus; who hath established the science of botany on the most solid foundation, by introducing a method of arrangement, if not absolutely perfect, at least as nearly approaching to perfection as can be expected; and therefore hath been deservedly followed, in preference to every other, by all botanists, since its first publication. But to give a particular account of all the different botanical systems, with the particular advantages and disadvantages attending each, shall be the business of the subsequent sections.

SECT. II. *Of the Ancient Method of arranging Vegetables.*

In giving an account of the works of Theophrastus and Dioscorides, we have already taken notice that the former chose seven distinguishing characters, viz. the generation of plants; their place of growth; their size, as trees and shrubs: their use, as pot-herbs and esculent grains; and their lactescence, or liquor that flows from them when cut. Dioscorides divided them into aromatics, alimentary, medicinal, and vinous plants. The good properties of this method are, that the botanist as it were comes to the point at once; and when he knows the plant, knows also its virtues and uses, or at least part of them: but this convenience is greatly overbalanced by innumerable disadvantages; for the qualities and virtues of plants are neither fixed and invariable, nor are they impressed in legible characters on the plants themselves. The different parts of a plant often possess different and even opposite virtues; so that supposing the virtues to be known, and applied to the purpose of vegetable arrangement, the roots must frequently fall under one division, the leaves under a second, and the flower and fruit under a third. Besides, if we reflect that the sole end of such arrangement is to facilitate the knowledge of plants to others, the insufficiency and even absurdity of methods founded upon their virtues will immediately appear. A stalk of vervain, for instance, is presented to me, which I am to investigate from a presupposed knowledge of the virtues of plants. Before I can settle the class to which it belongs, I must discover whether or not it has the virtues belonging to any of the plants I know; and this discovery

covery being the result of repeated experiments on various parts of the human body, may require many years for its accomplishment.

The same causes which render methods founded on the virtues of plants unfavourable for the purpose of investigation, must evidently disqualify all their other variable quantities and accidents from having a place in a genuine systematic arrangement. The *natale solum* of plants, which is one of Theophrastus's divisions, affords no better distinctive characters than their powers and virtues. Many countries as well as many soils produce the same individual plants. The same species which crown the mountains, frequently cover the fens; and plants which have long been reckoned the peculiar inhabitants of some parts of Asia and America, are now found to grow naturally in equal perfection in the very different climates of Lapland and Siberia. The size of plants, which suggested the ancient division into trees and shrubs, is no less an equivocal mark of distinction than the circumstances already mentioned. The vine, which modern botanists denominate a shrub, was ranged by Theophrastus in his third class containing trees. In fact, every thing respecting size is so much affected by differences of soil, climate, and culture, that the same plant, in different circumstances, shall differ exceedingly in height; and in a method founded upon the size, would sometimes be ranged as a tree, and sometimes as a shrub, or even an under-shrub, according as it happens to exceed, equal, or fall short of, a given standard. No less insufficient are characteristical marks drawn from the colour, taste, and smell of plants. Of all the attributes of vegetable nature, colour is perhaps the most inconstant. Heat, climate, culture, soil, &c. contribute to the production of endless diversities of colour, and render the transition from one to another natural and easy. Red and blue pass easily into white, white into purple, yellow into white, red into blue, blue into yellow, &c. In the same leaf or flower, different colours are frequently observed. Variations too in point of colour are frequently observed to take place not only in different individuals of the same species, but even in similar parts of the same plant. Marvel of Peru and Sweet William produce flowers of different colour upon the same stalk. Objections equally valid lie against characteristical marks drawn from the taste and smell. The former varies in different individuals from differences of age, and even in the same individual at different times, according to the morbid or sound state of the organ. The latter is different in different subjects, and varies in each; nor are the effluvia sent forth from the same body always of equal intensity. In plants, taste is subject to continual variations from differences of climate, soil, and culture. Garlic in some climates, particularly in Greece, is said to lose its rankness: apples and pears, that grow naturally in the woods, are intolerably acid; celery and lettuce, which culture renders sweet and palatable, are in their wild uncultivated state bitter, disagreeable, and in some cases noxious.

These considerations are abundantly sufficient to show the imperfections of the ancient system of botany; and, indeed, considering the vague and uncertain marks by which the ancients distinguished one plant from another, we may rather wonder how such a science as botany came to have an existence among them, than that

they arrived at no greater perfection in it, or suffered it so soon to fall into oblivion.

SECT. III. *Of the different Botanical Systems from the time of Gesner to that of Linnaeus.*

THE insufficiency of the ancient botanical system being so fully shown in the last section, we think it needless to take much notice of the methods used by Tragus and his contemporaries and followers. The virtues of plants being found an insufficient characteristick, succeeding botanists had taken in the root, stem, and leaves; but these being also found insufficient and variable, Gesner turned his eye to the flower and fruit, as being the most permanent and unchangeable parts of the plant. In proposing the parts of fructification, however, as the most proper for arranging plants, he communicated no hints respecting the choice of some of those parts in preference to others. Each particular organ of the flower and fruit furnishes sufficient variety to serve as the foundation of a method; but all of them are not equally proper for this purpose. Cæsalpinus, the first follower of Gesner, made a mistake in his choice, and took his distinguishing characteristics only from the fruit. The parts of the flower, therefore, being employed by the first systematic writers only as subaltern directions in finding out orders and genera, it is evident that the plant could not be fully investigated for several months. Suppose a plant ripens its fruit in October, and does not produce flowers till the following May: the class, upon inspection of the fruit in the month of October, is immediately ascertained; but the plant still remains unknown, and will continue so upwards of six months after, if the characters of the order and genus have been made to depend on any part of the flower. Methods founded on the fruit have another inconvenience; plants constantly ripen their fruit in those countries where they grow naturally, but not always in the countries to which they may be accidentally transported. So far from this, many plants that are natives of a warm climate neither ripen nor form fruit in a cold one. Few of the African, Asiatic, and West-Indian plants produce fruit in Britain. A method, therefore, founded upon the fruit, could only facilitate the knowledge of such plants to be inhabitants of those countries where they grow: to the English botanist they could be of little or no service. The same objection cannot reasonably be urged against methods founded on the flower, since the influence of climates much colder than that of Britain has not been able to destroy the faculty of producing flowers in many, perhaps in most, of the plants just mentioned.

Cæsalpinus sets out with an ancient distinction of vegetables from their duration, into trees and herbs. With the former he combines shrubs; with the latter, under-shrubs; and distributes his plants into the 15 following classes. 1. Trees with the germ (radicle or principle of life in the seed) on the point of the seed. 2. Trees with the germ on the base of the seed. 3. Herbs having one seed only. 4. Herbs having two seeds. 5. Herbs having four seeds. 6. Herbs having many seeds. 7. Herbs having one grain or kernel. 8. Herbs having one capsule. 9. Herbs having two capsules. 10. Herbs having fibrous roots. 11. Herbs having bulbous roots. 12. Herbs having succory or en-

endive-like flowers. 13. Herbs having common flowers. 14. Herbs having several follicles or seed-bags. 15. Herbs having neither flower nor seed.

The inconveniences of this method have been already pointed out pretty fully, and will evidently appear upon an attempt to refer any common plant to one of the 15 abovementioned classes. His sections, orders, or secondary divisions, are 47 in number, and depend upon a variety of parts and circumstances. The principal of these are, the disposition, situation, and figure, of the flowers; the nature of the seed-vessel, or cover of the seeds; the situation of the radicle in the seed; the number of seed-lobes, or seminal leaves: the disposition of the leaves, and colour of the flowers. The lactescence too, or milkiness, which is observed in the compound flowers with flat florets, is made a characteristic distinction, and discriminates the first order of the 12th class. Thus, in the first systematic arrangements, the characters of the classes only were borrowed from the parts of fructification; while those of the subaltern divisions were very numerous, and respected every part of the plant; but that such divisions might be perfect, they should be constituted, like the classes, from the modifications of a single part of the fructification.

The great object had in view by Morison, who comes next in order to Cæsalpinus, was to investigate the order of nature, not to fabricate an easy method of arranging plants. Hence his system is devoid of uniformity, and clogged with a multiplicity of characters; his classes are frequently not sufficiently distinguished from one another, and the key of arrangement seems totally lost. He sets out with a division of plants, from their consistence, into ligneous or woody, and herbaceous. He founds his system on the fruit, the corollæ or blossoms, and the habit of the plants. His classes are as follow: 1. Trees. 2. Shrubs. 3. Under-shrubs. 4. Herbs climbing. 5. Herbs leguminous or papilionaceous. 6. Herbs podded. 7. Herbs tricapular or with three capsules. 8. Herbs with four or five capsules. 9. Herbs corymbiferous. 10. Herbs having a milky juice, or downy tops. 11. Herbs culmiferous, as grasses. 12. Herbs umbelliferous. 13. Herbs having three kernels. 14. Herbs having helmet-shaped flowers. 15. Herbs having many capsules. 16. Herbs berry-bearing. 17. Herbs called *capillary plants*, as the fern kind. 18. Anomalous or irregular herbs.

Of these classes, the fourth and eighth possess no genuine distinctive character; nor are the ninth and tenth classes sufficiently distinguished; the fifteenth class is not sufficiently distinguished from the eighth, nor the 16th from the fourth. His sections or secondary divisions, which are 108 in number, arise from the figure and substance of the fruit; the number of seeds, leaves, and petals; the figure of the root; the direction of the stem; the colour of the flowers; the place of growth; and, in one class, from the medicinal virtues of some of the plants that compose it.

In 1682, Ray proposed his method to the world, two years after the publication of Morison's, which served in some measure as its basis. It consisted originally of the following 25 classes: 1. Trees. 2. Shrubs. 3. Herbs imperfect. 4. Herbs having no flowers. 5. Capillary plants. 6. Staminate herbs having only the stamina. 7. Those having one naked seed. 8. Umbelliferous herbs. 9. Verticillated, annular, or ring-

shaped ones. 10. Rough-leaved plants. 11. Stellated or star-shaped ones. 12. Apple-bearing herbs. 13. Berry-bearing herbs. 14. Herbs having many pods. 15. Monopetalous uniform, or regular herbs. 16. Monopetalous irregular, or having different forms. 17. Tetrapetalous, having large pods. 18. Tetrapetalous, having small pods. 19. Papilionaceous. 20. Pentapetalous herbs. 21. Corns. 22. Grasses. 23. Grass-leaved plants. 24. Bulbous rooted plants. 25. Plants near akin to the bulbous.

This method Ray carefully corrected and amended at different times; so that the plan of arrangement which now bears the name of that author, and was first published in 1700, is entirely different from what had appeared in 1682. It now consists of 33 classes. Their distinguishing marks are taken from the port or habit of the plants; their greater or less degree of perfection; their place of growth; the number of seed-lobes, or seminal leaves, petals, capsules, and seeds; the situation and disposition of the flowers, flower-cup, and leaves; the absence or presence of the buds, flower-cup, and petals; the substance of the leaves and fruit; and the difficulty of classing certain plants. They are as follow.

1. Submarine, or sea-plants. 2. Fungi. 3. Mosses. 4. Capillary plants. 5. Those without petals. 6. *Platanipetalæ*, those with compound flowers; semisflosculous, or half-florets. 7. Those with compound flowers radiated. 8. Those with compound flowers, flosculous, or with whole florets. 9. Plants with one seed. 10. Plants umbellated. 11. Those stellated or star-shaped. 12. Rough-leaved plants. 13. Plants verticillate or whorled. 14. Those with many seeds. 15. Apple-bearing herbs. 16. Berry-bearing herbs. 17. Those with many pods. 18. Monopetalous herbs. 19. Those with two and three petals. 20. Those with great and small, or long and short, pods. 21. Leguminous plants. 22. Pentapetalous ones. 23. Bulbs, and bulbous-like plants. 24. Staminate ones, or those having only the stamina. 25. Anomalous plants, or those of an uncertain family. 26. The palms. 27. Trees without petals. 28. Trees with an umbilicated fruit. 29. Trees with fruit not umbilicated. 30. Trees with a dry fruit. 31. Trees with podded fruit. 32. Anomalous, or irregular trees.

The distinction into herbs and trees with which Ray's method sets out, acknowledges a different, though not more certain, principle than that of Cæsalpinus and Morison. The former, in making this distinction, had an eye to the duration of the stem; the latter, to its consistence. Ray called in the buds as an auxiliary; and denominates trees, "all such plants as bear buds;" herbs, "such as bear none." But against this auxiliary there lies an unanswerable objection; namely, that though all herbaceous plants rise without buds, all trees are not furnished with them: many of the largest trees in warm countries, and some shrubby plants in every country, being totally destitute of that scaly appearance which constitutes the essence of a bud. In other respects, it is evident that neither Mr Ray's plan nor execution is in any degree calculated to facilitate the knowledge of plants. In fact, it seems to have been Ray's great object, no less than Morison's, to collect as many natural classes as possible; and these being separately investigated, a multiplicity of characters and steps was necessarily required to connect them: and

hence

hence the intricacy complained of in both these methods, which must always take place where the classes give rise to the connecting characters, and not the characters to the classes. The characters of the orders, or secondary divisions, in Ray's method, are no less multifarious than those of the classes. They respect the place of growth of plants; their qualities; the figure of the stem; the number, situation, substance, and division, of the leaves; the situation and disposition of the flowers and calyx; the number and regularity of the petals; with the number and figure of the fruit. In his improved method, Ray has adopted Tournefort's characters of the genera, wherever his plan would permit. His general History of Plants contains 18,655 species and varieties. The third volume, which was not published till 1704, and was designed as a supplement to the two former, contains the plants discovered by Tournefort in the Levant, and by Camelli at Luzon one of the Philippine islands. Ray's method was followed by Sir Hans Sloane, in his Natural History of Jamaica; by Petiver, in his British Herbal; by Dillenius, in his Synopsis of British plants; and by Martin, in his Catalogue of plants that grow in the neighbourhood of Cambridge.

To Ray's original method succeeded that of Christopher Knaut, a German; which acknowledges the same principle, and is manifestly founded upon it. In his enumeration of the plants that grow round Hal in Saxony, published in 1687, he divides vegetables into 17 classes, which have for their basis the size and duration of plants, the presence or absence of the petals, the disposition of the flowers, the substance of the fruit, the number of capsules or seeds, the number and figure of the petals, and the presence, absence, or figure of the calyx. His classes are, 1. Herbs berry-bearing. 2. Monopetalous, or with one flower-leaf. 3. Tetrapetalous and regular, with four petals. 4. Tetrapetalous and irregular. 5. Pentapetalous, or with five petals. 6. Hexapetalous, or six petals. 7. Polypetalous, or many petals. 8. Multicapular, or many capsules. 9. Naked seeds. 10. Solid, or not downy. 11. Downy seeds. 12. Without petals. 13. Staminate, without petals or calyx. 14. Imperceptible. 15. Imperfect. 16. Trees. 17. Shrubs.

The sections or subdivisions of the classes in Knaut's method are 62 in number; and arise from the figure of the stem and petals, the number of capsules and cells, their figure, the number of seeds and leaves, and situation of the flowers.

In 1696, a new method, proposed by Dr Herman professor of botany at Leyden, was published by Zumbac, who arranged according to it the plants contained in the public garden of Leyden. Rudbeckius the Younger, in a dissertation published the same year, on the fundamental knowledge of plants, adopted Herman's method with a few inconsiderable variations. The classes of Dr Herman are 25 in number. They are founded on the size and duration of the plants; the presence or absence of the petals and calyx; the number of capsules, cells, and naked seeds; the substance of the leaves and fruit; the form and consistence of the roots; the situation and disposition of the flowers, leaves, and calyx; and figure of the fruit. 1. Herbs having one naked seed and a simple flower. 2. Having one naked seed and a compound flower. 3. With two naked seeds, and stellated or star-shaped. 4. Two naked seeds, and

umbelliferous. 5. Four naked seeds, and rough leaves. 6. Four naked seeds, and verticillated or whorl-shaped. 7. With many naked seeds. 8. Having seed-vessels, bulbous and tricapular. 9. Having one seed-vessel. 10. With two seed-vessels. 11. With three seed-vessels. 12. With four seed-vessels. 13. With five seed-vessels. 14. Podded, which are always tetrapetalous. 15. Leguminous and papilionaceous. 16. With many capsules. 17. Having fleshy fruit, berry-bearing. 18. With fleshy fruit, apple-bearing. 19. Without petals, but having a calyx. 20. Without petals, chaffy or staminate. 21. Without petals, calyx, chaff, or stamina, i. e. a naked antheræ, as the mosses. 22. Trees. Imperfect fructification, bearing catkins. 23. Trees with a fleshy fruit umbilicated. 24. Trees with a fleshy fruit not umbilicated. 25. Trees with a dry fruit.

The classes in Herman's method are subdivided into 82 sections or orders; which have for their basis the number of petals, seeds, capsules, and cells, the figure of the seeds and petals, and disposition of the flowers.

To the method of Dr Herman succeeded that of Dr Boerhaave, who succeeded to the botanical chair of Leyden in 1709. His method is that of Herman, blended with part of the systems of Tournefort and Ray; and contains the following classes. 1. Herbs submarine, or sea-plants. 2. Imperfect land-plants. 3. Capillary plants, or the fern kind. 4. Many naked seeds. 5. Four naked seeds, and verticillated. 6. Four naked seeds, and rough leaves. 7. Four naked seeds, and four petals. 8. Plants having one seed-vessel. 9. Two seed-vessels. 10. Three seed-vessels. 11. Four seed-vessels. 12. Five seed-vessels. 13. Many seed-vessels. 14. Two naked seeds, and umbelliferous. 15. Two naked seeds, and star-shaped. 16. One naked seed, and a simple flower. 17. One naked seed, and compound flowers semisflosculous. 18. One naked seed, and compound flowers radiated. 19. One naked seed, and compound flowers corymbiferous. 20. One naked seed, and compound flowers flosculous. 21. Berry-bearing herbs. 22. Apple-bearing herbs. 23. Without petals. 24. One cotyledon, and having petals. 25. One cotyledon, and without petals. 26. Trees having one cotyledon. 27. Many podded. 28. Podded. 29. Tetrapetalous and cruciform. 30. Leguminous. 31. Having no petals. 32. Bearing catkins. 33. Monopetalous flowers. 34. Rosaceous flowers.

These 34 classes of Dr Boerhaave are subdivided into 104 sections, which have for their characters, the figure of the leaves, stem, calyx, petals, and seeds; the number of petals, seeds, and capsules; the substance of the leaves; the situation of the flowers, and their difference in point of sex. By this method, Dr Boerhaave arranged near 6000 plants, the produce of the botanical garden at Leyden, which he carefully superintended for the space of 20 years, and left to his successor Dr Adrien Royen, in a much more flourishing state than he himself had received it. His Index or Catalogue of the Leyden plants was published in octavo in 1710; and afterwards, with great additions, in quarto, in 1720. This last edition contains descriptions of 5650 plants; of which number upwards of two-thirds had been introduced into the garden since the time of Herman, by his illustrious successor. Boerhaave's characters are derived from the habit or general appearance of plants combined with all the parts of fructification;

so that, as Linnæus very properly observes, he was the first who employed the calyx, stamina, and style, in determining the genus. About 17 new genera were established by this author; among others, the very splendid family of the protea and silver-tree, which, although partly described by Morison, had remained generally unknown till this period. His method was adopted by one Emsting, a German, in a treatise intitled *The first principles of Botany*, published in octavo at Wolfenbüttele, in 1748.

Hitherto all the botanists had been intent upon investigating the order of nature, rather than facilitating the arrangement of vegetables: therefore their methods were very intricate and perplexed; and their writings, however entertaining to the learned, could afford but very little instruction to the young botanist. In 1690, however, Augustus Quirinus Rivinus, a German, professor of botany at Leipzig, relinquishing the pursuit of natural affinities, and convinced of the insufficiency of characteristic marks drawn only from the fruit, attached himself to the flower, which, he was sensible, would furnish characters no less numerous, permanent, and conspicuous, than those drawn from the fruit. The calyx, petals, stamina, and style or pointal, which constitute the flower, are sufficiently diversified in point of number, figure, proportion, and situation, to serve as the basis of a mode of arrangement; yet all are not equally proper for this purpose. Rivinus made use of the petals as the largest and most beautiful part, and that from which the flower itself is commonly characterized. His method consists of the following 18 classes, which have for their basis the perfection and disposition of the flowers, and regularity and number of the petals. 1. Regular monopetalous, or having one petal. 2. Dipetalous. 3. Tripetalous. 4. Tetrapetalous. 5. Pentapetalous. 6. Hexapetalous. 7. Polypetalous, or having many petals. 8. Irregular monopetalous. 9. Irregular dipetalous. 10. Irregular tripetalous. 11. Irregular tetrapetalous. 12. Irregular pentapetalous. 13. Irregular hexapetalous. 14. Irregular polypetalous. 15. Compound flowers of regular florets. 16. Compound flowers of regular and irregular florets. 17. Compound flowers of irregular florets only. 18. Incomplete, or imperfect plants.

As Rivinus set out with the professed design of imparting facility to botany, he judged very properly in divesting his method of all extraneous matter, and rendering it as simple and uniform as the nature of the science would admit. The distinction into herbs and trees had been adopted by every writer on plants since the time of Aristotle. Rendered in some measure sacred by its antiquity, this distinction maintained a kind of importance to which it was by no means essentially intitled. Rivinus was the first who in this matter dared to think for himself. He was early sensible of the inconveniences to which those had submitted who employed it as a primary division; and therefore resolved at once to get rid of a distinction that is frequently uncertain, always destructive to uniformity, and in its nature repugnant to the genuine spirit of system, because totally unconnected with the parts of fructification. In the uniformity of its orders or secondary divisions, which are 91 in number, and acknowledge the fruit for their principle, Rivinus's method equals, perhaps excels, all that went before or succeeded it. Only three

classes of his method were published by Rivinus himself. These are the 11th, 14th, and 15th, which were offered to the public at different times, illustrated with very splendid figures. The method was completed and published entire by Heucher, in a work intitled *Hortus Wirtembergensis*, printed in quarto at Wirtemberg in 1711.

Several German authors have followed Rivinus's method, either wholly or in part, without offering any considerable amusement. The principal of these are, Koenig, in a work on vegetables, published at Basil in 1696; Welsch, in his *Basis Botanica*, printed at Leipzig in octavo, in 1697; Gemeinhart, in a catalogue of plants published in 1725; Kramer, in a work intitled *Tentamen Botanicum*, published at Dresden in 1728, and afterwards reprinted with additions at Vienna in 1744; and Hecker in a dissertation on botany published at Hal in Saxony, in 1734. To these may be added Hebenstreit, an ingenious botanist, who in a treatise on plants published at Leipzig in 1731, just before his famous African expedition, established generical characters, which had hitherto been wanting in Rivinus's method.

The writers who have attempted to improve upon Rivinus's method are Bernard Ruppis, Christopher Ludwig, and Christian Knaut. Ruppis, in his *Flora Jenensis*, published at Francfort in 1718, has arranged the 1200 plants there described by a method partly Rivinus's and partly his own. It consists of 17 classes, and sets out with the same divisions and subdivisions as that of Rivinus's; with this difference, however, that, whereas in Rivinus's method all perfect methods are divided into simple and compound, in Ruppis the division of regular and irregular flowers precedes that just mentioned, and simple and compound flowers are made subdivisions of the regular flowers only.

Christopher Ludwig's method, which was published in 1737, and consists of 20 classes, differs but little from that of Rivinus. The author accompanied Hebenstreit on his expedition into Africa, and seems to have made plants his favourite study. The improvement, however, which he has made on Rivinus's plan, consists only in rendering it more universal, having enriched it with a multitude of genera collected from the works of Tournefort, Ray, Boerhaave, Dillenius, and other eminent botanists, whose generical characters he has likewise adopted. His plan of arrangement has been followed by two succeeding writers; M. Wedel, in a botanical essay published in 1747; and three years after by M. Boehmer, in his catalogue of the plants which grow in the garden of Leipzig.

The method of Christian Knaut is much more properly his own, and departs in a much greater degree from that of Rivinus than either of the two former. The regularity and number of the petals furnished the classical divisions in Rivinus's method: in that of Knaut, number takes place of regularity; so that it is very properly termed by Linnæus, "The system of Rivinus inverted." This method was published in 1716; and sets out with a division into flowers which have one petal, and such as have more than one. It consists of the following classes. 1. Monopetalous uniform or regular. 2. Monopetalous difform or irregular. 3. Monopetalous compound uniform or regular. 4. Monopetalous compound difform or irregular. 5. Monopetalous compound uniform and difform together. 6. Dipetalous uniform

uniform or regular. 7. Dipetalous difform or irregular. 8. Tripetalous uniform or regular. 9. Tripetalous difform or irregular. 10. Tetrapetalous uniform or regular. 11. Tetrapetalous difform or irregular. 12. Pentapetalous uniform or regular. 13. Pentapetalous difform or irregular. 14. Hexapetalous uniform or regular. 15. Hexapetalous difform or irregular. 16. Polypetalous uniform or regular. 17. Polypetalous difform or irregular.

The sections or secondary divisions in Knaut's method are 121, and depend upon the internal divisions of the fruit; and upon this his divisions are somewhat singular. Every kind of fruit, whether pulpy or membranaceous, is termed by our author a *capsule*. Neither is the term restricted to fruits properly so called: it is extended also to those termed by botanists *naked seeds*, the existence of which Knaut absolutely denies. Agreeable to this opinion, capsules, he says, with respect to their consistence or substance, are of two sorts; pulpy, or membranaceous. The former correspond to the fruits of the apple, berry, and cherry kind; the latter to the capsules properly so called, and naked seeds of other botanists. Again, with respect to their cells or internal divisions, capsules are either simple or compound. Simple capsules have an undivided cavity or a single cell; compound capsules are internally divided into two or more cells. With other botanists, the umbelliferous flowers bear two, the lip-flowers four, naked seeds; according to Knaut, the former produce two, the latter four, simple capsules. Ranunculus, adonis, anemomy, herb-bennet, and some other plants, have their flowers succeeded by a number of naked seeds collected into an aggregate or head; each of these seeds passes with Knaut for a simple capsule; so that the whole is an aggregate of several capsules with an undivided cavity or single cell. In numbering the cells or internal divisions of the pulpy fruits, our author has adopted a very singular method. Some fruits of the apple kind inclose a capsule that is divided into five membranaceous cells. It might then be very reasonably expected to find such fruits arranged with compound capsules of five cells: but, instead of this, the author whimsically enough combines in their arrangement the idea both of a simple and compound capsule. The pulpy part is undivided; in other words, it is a simple capsule furnished with one cell; the compound capsule inclosed contains five cells, which added to that of the pulp make the number six; and thus these kinds of fruits are arranged with those having capsules of six cells. By the same kind of reasoning, the fruit of the dogwood, which is of the cherry kind, and contains a stone with two cells or cavities, is placed by Knaut among compound capsules with three cells; the pulp passing for one division, and cavities of the stone or nut for the remaining two. This method of calculation is not the only singularity for which Knaut is remarkable. The essence of the flower is made by Ray, Tournefort, Rivinus, and most other botanists, to consist in the stamina and style. This position Knaut absolutely denies; and has established for a principle, that the flower is essentially constituted by the petals only. With him, the flower-cup, stamina, and style, are of little significance: their presence does not constitute a flower, if the petals are wanting; neither is their absence sufficient to destroy its existence, if the petals are present.

From this it follows, 1. That there can be no flowers without petals; and, 2. That the regularity or irregularity of the flower can never depend on the stamina and style, which are only occasionally present, and no-wise essential to its existence; both of which are evidently false to every botanical reader.

Since the time of Rivinus, no leading method in botany has appeared except that of Tournefort and Linnaeus. Tournefort sets out with reviving the distinction of plants into herbs and trees, which had been exploded by Rivinus. His system is founded on the regularity and figure of the petals, together with the two-fold situation of the receptacle of the flowers; his orders, on the pistillum or calyx. The classes are, 1. Herbs with simple flowers monopetalous, and bell-shaped. 2. Simple flowers monopetalous, tunnel and wheel-shaped. 3. Simple flowers monopetalous, labiated or lipped. 4. Simple flowers monopetalous, anomalous or irregular. 5. Simple flowers monopetalous, cruciform or cross-shaped. 6. Simple flowers polypetalous, and rosaceous or like a rose. 7. Simple flowers polypetalous, umbellated. 8. Simple flowers polypetalous, caryophyllaceous, clove-form. 9. Simple flowers polypetalous, liliaceous or lily-form. 10. Simple flowers polypetalous, papilionaceous, or butterfly form. 11. Simple flowers polypetalous, anomalous or irregular. 12. Compound flowers, flosculous, tubular or whole florets. 13. Compound flowers semiflosculous, flat or half florets. 14. Compound flowers radiated, like the spokes of a wheel. 15. Apetalous, having no petals. 16. No flower, but bearing seed. 17. No flower nor seed, in the vulgar estimation. 18. Trees with no petals, but bare stamina. 19. Trees with no petals bearing catkins. 20. Trees monopetalous. 21. Trees rosaceous. 22. Trees papilionaceous.

The secondary divisions in Tournefort's method, which are 122 in number, have obtained the name of *sections*. Their general distinctions are founded principally upon the fruit, as those of the classes are upon the flower.

Tournefort hath been followed by a vast number of botanical writers, of whom the most considerable are, Dr William Sherard, an eminent botanist of the last and present centuries. In 1689, he published the first sketch of Tournefort's method, under the title of *Schola Botanica*; or a catalogue of the plants demonstrated by Dr Tournefort, in the royal garden at Paris. It was not till five years after, that the *Elementa Botanica*, a work which contains the rudiments and illustration of his method, was published by Tournefort himself.—Father Plumier, termed by way of eminence the *Tournefort of America*, published in 1703, at Paris, a description of American plants, which he has arranged according to the system of Tournefort. In this work he accurately characterized 96 new genera. Falugi, an Italian, has described, in pretty elegant Latin verse, all the genera of Tournefort, in a work intitled *Protopoeia Botanica*, published at Florence, 12mo, 1705. Several celebrated French academicians, particularly Marchant, Dodart, Nissolle, Jossieu, and Vaillant, have also occasionally paid their tribute of acknowledgment to this author, from the year 1700 to 1740. The other authors of note who have followed Tournefort's method, are, M. Petit, an ingenious French botanist; Jöhren, a German, author of a treatise published at Colberg

Colberg in 1710, intituled *Vade mecum Botanicum, seu Odeus Botanicus*; Fuelle, in his description of the plants of Chili and Peru, published at Paris in quarto, 1714; Christopher Valentin, a German author of a book intituled *Tournefortius Contractus*, published at Francfort, in folio, 1715; Ripa, an Italian, in a work intituled *Historia Universalis Plantarum Conscribendi Propositum*, published in quarto, at Padua, in 1718; Michael Valentin, a German, in his *Viridarium Reformatum*, published in folio, at Francfort, in 1719; the celebrated Dillenius, professor of botany at Oxford, and author of several much esteemed publications on botany, particularly the *Hortus Elthamensis*, and History of Mosses, in his *Flora Giffensis*, printed at Francfort in 1719; Pontedera, an Italian, author of the delineation of a method which combines those of Tournefort and Rivinus, published at Padua, in his botanical dissertations, in 1720; Monti, an Italian, in a work published at Bologna in 1724, under the title of *Indices Plantarum Varii*; Lindem, a German, in his *Tournefortius Alsaticus*, first published in 1728; Signior Micheli, author of several curious discoveries respecting mosses and mushrooms, in his *Nova Genera Plantarum*, published in folio at Florence in 1729; Elvebemes, a Swede, in a work published in the Swedish language at Upsal in 1730; Fabricius, a German, author of a work intituled *Primitia Floræ Butisbacensis, seu sex Decades Plantarum Rariorum*, published in 1743; Sabbati, an Italian, in his catalogue of the plants that grow in the neighbourhood of Rome, printed at Rome in 1745; and the ingenious Dr Charles Allston, late professor of botany at Edinburgh, in his *Tyrocinium Botanicum*, published at Edinburgh in 1753.

Of all this numerous list of writers, Father Plumier and Pontedera alone have ventured to quit the tract pointed out by Tournefort. The former, in his arrangement of American plants, has relinquished the distinction into herbs and trees; but the latter has attempted more considerable variations. His classes are, 1. Uncertain. 2. Having no flowers. 3. Without buds, imperfect plants. 4. Anomalous or irregular. 5. Labiated. 6. Bell-shaped. 7. Saucer-shaped. 8. Wheel-shaped. 9. Tunnel-shaped. 10. Flosculous. 11. Semiflosculous. 12. Radiated. 13. Irregular. 14. Papilionaceous. 15. Liliaceous. 16. Caryophyllaceous. 17. Cruciform or cross-shaped. 18. Umbellated. 19. Staminate, or with naked stamens. 20. Bearing buds, apetalous, or without petals. 21. Bearing buds irregular. 22. Bearing buds bell-shaped. 23. Bearing buds wheel-shaped. 24. Bearing buds tunnel-shaped. 25. Bearing buds, papilionaceous. 26. Bearing buds, rosaceous.

Besides all these methods, there have been invented two others, founded upon the calyx. The first of these was the invention of Peter Magnol, a celebrated professor of botany at Montpellier, and published in 1720, five years after the author's death. The other was delineated by Linnæus, and published in his *Classes Plantarum* in 1738, three years after the publication of the sexual system. Magnol distinguishes two kinds of calyx; one external, which envelopes and sustains the flower, and is the flower-cup properly so called; the other internal, which is the seed vessel or fruit. According to this idea, all plants, whether herbaceous or woody, are furnished with either the external calyx only, or with both. His classes are, 1. Herbs with the calyx

external, including a flower unknown. 2. Calyx external, including a flower staminate. 3. Calyx external, including a flower monopetalous. 4. Calyx external, including a flower polypetalous. 5. Calyx external, including a flower compound. 6. Calyx external, supporting a flower monopetalous. 7. Calyx external, supporting a flower polypetalous. 8. Calyx internal only, which is the corolla. 9. Calyx external and internal, flower monopetalous. 10. Calyx external and internal, flower with two and three petals. 11. Calyx external and internal, tetrapetalous. 12. Calyx external and internal, polypetalous. 13. Trees with the calyx external only. 14. Calyx internal only. 15. Calyx external and internal both.

The characters of the orders, or secondary divisions, in Magnol's method, are derived chiefly from the figure of the calyx, petals, and seeds; from the disposition of the flowers, from the number of petals, and substance of the fruit. Fifty-five sections or orders arise from the combination of these characters with those of the classes; and these are again subdivided into genera, which possess this singularity, that, in place of distinctive characters hitherto employed, they exhibit complete descriptions of all the parts of fructification of one or two species of each genus. From this improvement Linnæus manifestly borrowed the hint of his generical characters.

Sir John Hill, in his vegetable system, endeavours to class plants according to their internal structure*. * Vol. I.

"Perhaps (says he), upon the foundation of a true P. 130. anatomy of plants a natural method may be established: for it is certain, the forms of all the external parts of vegetables depend on the disposition of the internal; and all their differences are founded there. On the different inner structure of the vegetable body, under certain courses of its vessels, evidently depend the differences which characterize the seven first families, to the distinctions of which all classes are subordinate; and as these original distinctions are truly natural, we may here begin very safely.

"The seven families are these, 1. The mushrooms. 2. The algæ, or foliaceous sea and land plants. 3. The mosses. 4. The ferns. 5. The grasses. 6. The palms. 7. The common race of plants. Their distinctions one from another are these:

"1. The mushrooms are fleshy; and are destitute of leaves and visible flowers. 2. The algæ are merely foliaceous, the entire plant consisting of a leafy matter without other visible parts. 3. The mosses have processes of the inner rhind for leaves. 4. The ferns consist of a single leaf raised on a stalk; and bear their flowers upon its back. 5. The grasses have jointed stalks and undivided leaves, and husks to hold the seeds. 6. The palms have a simple trunk, with leaves only on the top, and have the flowers and fruit in divided ears."

Lastly, the seventh class, which he calls the *common race of plants*, are such as have their roots, leaves, stalks, flowers, and fruits, distinct and obvious; and have not the characters of any of the other six families.

To this natural method his artificial one, consisting of 43 classes, and which takes up the whole of his voluminous work, is designed only as an index; but as this is universally allowed to be inferior to Linnæus's, though he pretends to improve that system, we think it needless to take any farther notice of it.

Besides the sexual system of Linnæus, which is now almost universally followed, he formed another, which, like that of Magnol, had the calyx for its basis; but greatly superior both in the idea and execution, being indeed singularly serviceable to the novice in botany, by familiarizing to him various appearances of an organ so important in its nature, and so diversified in its form, as the calyx is. The classes are, 1. Spathaceous, like a sheath or hose. 2. Glumose or chaffy. 3. Amentaceous, or catkins. 4. Umbellated. 5. Common calyx or flower cup. 6. Double calyx. 7. Flowering; the petals and stamina inserted into the flower-cup. 8. Crowned, or crown-shaped, with a radius. 9. Irregular. 10. Difform, or different shapes. 11. Caducous, which fall off or shed their leaves. 12. Not caducous, uniform and monopetalous. 13. Not caducous, uniform and polypetalous. 14. Not caducous, difform and monopetalous. 15. Not caducous, difform and polypetalous. 16. Incomplete calyx. 17. Apetalous, or a bare calyx without petals. 18. Naked, or neither petals nor calyx.

SECT. IV. *Of the Method of reducing Plants to Classes, Orders, Genera, and Species, according to Linnæus's Sexual System.*

BEFORE proceeding to explain this system, it will be proper to make the reader acquainted with the principal outlines of a plant, as delineated by our author in his *Principia Botanica*.

A plant consists of Root, Trunk, Leaves, Props, Fructification, and Inflorescence; to which may be added the Habit.

I. The ROOT consists of two parts, viz. the caudex and the radicle, distinguished according to shape, direction, duration, &c.

1. CAUDEX, or *stump*, is the body or knob of the root from which the trunk and branches ascend, and the fibrous roots descend; and in different plants is either solid, bulbous (placed under a bulb), or tuberous. Solid, as in trees, shrubs, and many of the herbs. Bulbous will be explained under *Hybernacle*.—Tuberous knobs are also solid and hard, containing one or more embryos or eyes. They are either only one knob, as turnip, carrot, &c. containing only one eye at the top; or consist of many knobs connected together by slender fibres, as in potatoes, Jerusalem artichokes, &c. each containing many eyes dispersed over the surface: and are either pitted, when the eyes lie inward, as in potatoes, &c. or tuberculated, containing the eyes outward, as in Jerusalem artichokes, &c. In tuberous knobs, the fibres or stringy parts issue from every part of the surface; which is an essential difference from bulbous knobs, where they are confined to the caudex of the bulb only, and are the true and genuine roots, the bulb itself being only a large bud under ground. Those tuberous knobs with only one eye, differ as to duration, but are in general biennial; those with many eyes are perennial; both seem to be produced by the nutriment of the stem like buds, and not by the fibrous roots, for the stem is first formed and becomes strong, and as it grows to maturity, the tuberous knobs increase.

2. RADICULA, a *little root*, is the stringy or fibrous part of the root, descending from the caudex: it is really the principal and essential part of every root, and

by which the nourishment is drawn from the earth for the support of the plant.

II. The TRUNK, which includes the branches, is that part which rises immediately from the caudex, and produceth the leaves, flowers, and fruit. It is either herbaceous, shrubby, or arboresecent; and is distinguished according to its shape, substance, surface, &c. and admits of the following sorts.

1. CAULIS, a *stalk* or *stem*, is the main or universal trunk which elevates the leaves and fructification, and is applied to trees, shrubs, and herbs: It is denominated *simple* when it doth not divide, and *compound* when it is divided into branches.

2. CULMUS, a *straw* or *halm*, is the proper trunk of grasses; and also elevates both the leaves and fructification: It is sometimes jointed, and sometimes not; it is also sometimes round, and sometimes angular.

3. SCAPUS, a *stalk*, is an herbaceous trunk, which elevates the fructification, but not the leaves; that is, it is a stalk proceeding immediately from the root, and terminated by the flowers, as in narcissus, hyacinth, &c.

4. STIPES, a *trunk*, used by Linnæus for the trunk of mushrooms; as also for that slender thread or footstalk which elevates the feathery or hairy down with which some seeds are furnished, and connects it with the seed.

III. The LEAVES are said by Linnæus to be the muscles or organs of motion of a plant; by others, the organs by which perspiration and inspiration are performed. They are defined as proceeding from the expansion of the vessels of the stalk, forming several ramifications like net-work, extended in length and breadth in a determinate manner, having the interstices filled up with a tender pulpy substance; and the external covering is supposed to be a continuation of the scarf-skin of the stalk.

Leaves are either simple or compound; and are distinguished by their figure, situation, insertion, number, divisions, &c.

A *simple leaf*, is such as either adheres to the branch singly, or whose footstalk is terminated by a single simple expansion, not parted to the middle rib; and is determined by its shape, surface, and divisions.

A *compound leaf*, is such whose footstalk is furnished with several separate simple expansions; or, in other words, whose divisions extend to the middle rib, now called a *common petiole* or footstalk, supporting several lobes or little simple leaves, of which the compound leaf consists: they are distinguished by shape, &c. and the form by which they are attached to the common footstalk, as palmated, winged, feathered, &c. Sometimes leaves are twice or more compounded; which divisions admit of many modifications, and give rise to as great variety of terms. It may sometimes be difficult, at first sight, to know a common footstalk to a compound leaf, from a branch: but it may be observed, that a common footstalk, where it issues from the branch, is either flat or hollow on one side, and convex on the other; whereas branches are alike on both sides, whether round, flat, or angular: again, buds are never found at the angles formed by the lobes of a compound leaf with the footstalk, but at the angles formed by the footstalk of the whole compound leaf and the stem: and it may always certainly be distinguished by its falling off with the little leaves which it supports.

The manner or place in which leaves are attached to the plant, is called the *determination of leaves*; and is distinguished by several terms, according to number, disposition, insertion, figure, &c.

IV. The PROPS, *fulcra*, a term used to express those external parts which strengthen, support, or defend the plants on which they are found, or serve to facilitate some necessary secretion; and are as follow:

1. PETIOLUS, the footstalk or support of a leaf.
2. PEDUNCULUS, the footstalk or support of a flower.
3. STIPULA, *hauhm* or *husk*, a sort of scale or small leaf, stationed on most plants (when present) on each side the base of the footstalk of leaves and flowers, at their first appearance, for the purpose of support: They are placed either single or double; and sometimes on the inside, as in the fig and mulberry; or on the outside, as in the birch, lime, and papilionaceous flowers: They are also either sitting, extended downwards, or sheathing along the stem, as in the plane tree. As to duration, they sometimes fall before the leaves, and sometimes are equally persistent: They often afford a good distinction for the species.
4. CIRRHUS, a *curl*, meaning a clasper or tendril, is the fine spiral string or fibre by which plants fasten themselves to some other body for support: They are sometimes placed opposite to the leaves; sometimes at the side of the footstalks of the leaves; sometimes they issue from the leaves themselves; and sometimes they put out roots, as in ivy, &c.
5. PUBES, a term applied to the hair, down, wool, beard, bristles, glands, and several other appearances on different parts of plants, serving the double purpose of defence and vessels of secretion.
6. ARMA, the defensive weapon of plants; as thorns, prickles, &c.
7. BRACTEÆ, *thin plates of metal*, are the floral leaves; and mean not only those leaves situated on the stalk nearest to the lower parts of the flower, but those which sometimes terminate the flower stalk; being composed of large bractæ, resembling a bush of hair, and are then called *bractæa comosa*, as in crown-imperial, lavender, and some species of sage.

V. The FRUCTIFICATION, or *mode of fruit-bearing*, consisting of the calyx, corolla, stamina, pistillum, pericarpium, semina, and receptaculum; which will be afterwards explained.

VI. The INFLORESCENCE, or mode by which flowers are joined to their several peduncles, whether common or partial.

A flower in the Sexual botany hath a very different signification from the same term of former writers; for if the antheræ and stigma be present, though the calyx, corolla, filaments of the stamina, and style of the pistillum be wanting, it is still a flower; and if all the parts are present, it is a complete flower. The seed also constitutes the fruit, whether there be a pericarpium or not.

Complete flowers are either simple or aggregate; *simple*, when no part of the fructification is common to many flowers or florets, but is confined to one only; *aggregate*, when the flower consists of many florets collected into a head by means of some part of the fructification common to them all, as by a common receptacle, or common calyx; as in dipacus, scabiosa, &c.

From the different structure, disposition, and other circumstances of the receptacle or calyx, being the

only common part to aggregate flowers, arise seven divisions.

1. AGGREGATE, properly so called, consisting of such flowers as are formed by the union of several lesser flowers or florets, placed on partial peduncles, on a common dilated receptacle, and within a common perianthium; and in those flowers where each floret hath its proper calyx, that is also a perianthium. [A flower is said to be *radiate*, when the florets in the radius or circumference differ from those in the disk; in which case they are generally larger, and are called *semi-florets*, from their difference in form, and in distinction from those of the disk, which are called *proper-florets*; and they also differ as to sex, which gives rise to several of the orders in the class syngenesia, which contains the compound flowers.]

2. COMPOUND AGGREGATE, consisting also of several florets, placed sitting (or without partial peduncles) on a common dilated receptacle, and within a common perianthium; and where each floret hath its proper calyx, it is also a parianthium. Compound flowers also admit of a further description, viz. each floret consists of a single petal, with generally five divisions, and having five stamina distinct at the base, but united at the top by the antheræ into a cylinder, through which passeth the style of the pistillum, longer than the stamina, and crowned by a stigma with two divisions that are rolled backwards, and having a single seed placed upon the receptacle under each floret. This is the general character of a compound flower, to which there are a few exceptions; it also differs when the flower is radiate: but the essential character of a regular floret consists in the antheræ being united so as to form a cylinder, and having a single seed placed upon the receptacle under each floret.

3. UMBELLATE AGGREGATE, when the flower consists of many florets placed on fastigate peduncles proceeding from the same stem or receptacle; and which, though of different lengths, rise to such an height as to form a regular head or umbel, whether flat, convex, or concave; and both the common and partial calyx Linnæus calls an *involucrum*. It is called a *simple umbel*, when it hath no lesser divisions; a compound umbel, when each peduncle is subdivided at its extremity into many lesser peduncles for supporting the flowers, so as to form several little umbellas, uniting in one head; the whole together is called an *universal umbel*, and the little umbellas are called *partial umbels*. In some genera, that have radiated umbels, the florets of the center and those of the circumference, differ both as to sex and size; but in general each hath five petals, five stamina, and two styles, or one that is bifid, with a germen placed beneath and two naked seeds, which when ripe, separate below, but remain connected at the top.

4. CYMOUS AGGREGATE (from *cyma*, a sprout) called by Linnæus a *receptacle*, is when several fastigate peduncles proceed from the same centre like the umbel, and rise to nearly an even height; but unlike the umbel, the secondary or partial peduncles proceed without any regular order, as in sambucus, viburnum, &c.

5. AMENTACEOUS AGGREGATE, are such flowers as have a long common receptacle, along which are disposed squamæ or scales, which form that sort of calyx called an *amentum* or *catkin*, as in corylus, pinus, juglans, &c. Amentaceous flowers generally want the
3 H 2 petals,

petals, and all of them are of the classes monoecia and dioecia.

6. **GLUMOSE AGGREGATE**, are such flowers as proceed from a common husky calyx belonging to grasses, called *gluma*; many of which are placed on a common receptacle called *rachis*, collecting the florets into the spike, as *triticum*, *hordeum*, *secale*, *lolium*, &c.

7. **SPADICEOUS AGGREGATE**, are also such flowers as have a common receptacle, protruded from within a common calyx called *spatha*, along which are disposed several florets. Such a receptacle is called a *spadix*: and is either branched, as in *phoenix*; or simple, as in *narcissus*, &c.: In this last case the florets may be disposed, either all around it, as in *calla*, *dracontium*, *pothos*, &c.; on the lower side of it, as in *arum*, &c.; or in two sides, as in *zosteria*, &c. These flowers have generally no partial calyx.

These are the several distinctions of aggregate flowers (according to Linnæus); besides which there are several other modes of flowering, properly so called, that come under the general term *Inflorescence*, and often afford the best marks to discriminate the species. These modes of flowering are chiefly expressed as follows:

1. **VERTICILLUS**, a *whorl*, when the flowers are placed in whorls at each joint, round the common stalk: they have very short partial peduncles; are all of the labiated kind; and have either two or four stamina, and four naked seeds, as in *salvia*, *marrubium*, *mentha*, &c. A verticil hath several distinctions, as naked, bracted, &c.; and all those genera with four stamina are of the class *didynamia*.

2. **CAPITULUM**, a *little head*, is when many flowers are connected into nearly a globular form or head, on the summit of the common stalk, sometimes with and sometimes without partial peduncles, as in *gomphtena*, &c. and is distinguished by its shape and other circumstances.—Under *capitulum* is now introduced the term *fasciculus* (a *little bundle*), which in former editions stood distinct. It means when the peduncles are erect, parallel, approaching each other, and raised to the same height as in *sweet William*, where they generally proceed from different parts of the common stalk, opposite to each other.

3. **SPICA**, a *spike*, when the flowers, having no partial peduncles, are arranged alternately around a common simple peduncle. It is called *spica secunda* (a *single-row'd spike*), when the flowers are all turned one way, following each other; and *spica disticha* (a *double-row'd spike*), when the flowers stand pointing two ways, as in *lolium*, &c.: And it is distinguished by shape and other circumstances.

4. **CORYMBUS**, (a *cluster of ivy-berries*), when the lesser peduncles of the flowers proceed from different parts of the common peduncle or stalk; and though of unequal lengths, and sometimes simple, and sometimes branched, yet form a regular surface at the top; all in the siliquose plants (class *Tetradynamia*.) The corymbus may be supposed to be formed from a spike, by adding partial peduncles to the flowers; and seems to be the mean between racemus and umbella, the peduncles rising gradually from different parts of the common stalk, like those of the raceme, and proceed to a proportionable height like those of the umbel.

5. **THYRSUS** (a *young stalk*); a mode of flowering resembling the cone of a pine: Linnæus saith, it is a

panicle contracted into an ovate or egg-shaped form; the lower peduncles, which are longer, horizontally; and the upper, which are shorter, mount vertically, as *lyringa*, &c.

6. **RACEMUS**, (a *bunch of grapes*), is when the flowers are placed on short partial peduncles, proceeding as little lateral branches, from and along the common peduncle. It resembles a spike in having the flowers placed along a common peduncle, but differs from it in having partial peduncles: it also differs from a corymbus in the shortness and equal length of its peduncles, not forming a regular surface at the top; as in *ribes-rubrum*, *vites*, &c.

7. **PANICULA**, (the *tuft upon reeds*), is when the flowers are dispersed upon peduncles variously subdivided; or it is a sort of branching spike, composed of several smaller spikes, attached along a common peduncle, as in *avena panicum*, and several other grasses, and many other plants. When the partial peduncles diverge and hang loose, it is called a *diffuse*, and when they converge, it is called a *close panicle*.

To these may be added the term **AXILLARES**, (from *axilla*, the arm-pit), being such flowers as proceed from the angle formed by the leaf and the stem; as is most common: And **TERMINALES**, being such flowers as terminate the stalk or branch. Also every other mode of flowering is called the *Inflorescence*, whether opposite to the leaves, lateral, single, double, erect, bending, &c.

Under this head of *Inflorescence* may be explained **LUXURIANT FLOWERS**, (commonly called *double flowers*); which, as they are considered only as varieties and unnatural, belong properly to the head, Habit of plants. A luxuriant flower is supposed generally to be owing to superabundant nourishment; the luxuriant part is generally the corolla, but sometimes the calyx also. It is divided into three degrees: 1. *multiplicatus*; 2. *plenus*; 3. *prolifer*: To which may be added, as an opposite imperfection, *flos mutilatus*.

1. **MULTIPLICATUS**, when the petals of the corolla are only so far multiplied as to exclude part of the stamina; and is called *duplicate*, *triplicate*, *quadruplicate*, &c. according to the number of rows of petals.

2. **PLENUS**, when the corolla is so much multiplied, as to exclude all the stamina; which is occasioned by the stamina turning petals, and the flower is often so crowded as to exclude or choak the pistillum also. Therefore, as the essential parts of generation are thus wholly, or in part destroyed, the plants become barren and imperfect, and no seed, or very little, can be expected from them. Flowers with one petal are not very subject to fulness; when they are, it generally arises from an increase of the divisions of the petal. It is most usual in flowers of many petals, where it arises various ways; sometimes by multiplication of the petals only, sometimes of the calyx or nectarium, and sometimes of all. Compound flowers are also subject to luxuriance, arising several ways.

3. **PROLIFER**, when one flower grows out of another; this generally happens in full flowers, from their greater luxuriance. In simple flowers, it rises from the centre, and proceeds from the pistillum shooting up into another flower, standing on a single footstalk. In aggregate flowers (properly so called) many footstalk-ed flowers are produced out of one common calyx. In umbel-

umbellate flowers, a second umbel proceeds from the centre of the first umbel, producing little umbels; which by a greater exertion of luxuriance may produce others with little umbels, and thus may proceed several heads of flowers, each growing out of that immediately below it, furnished with little umbels variously compounded. A prolific flower is also called *leafy* (*frondosus*), when it produceth branches with flowers and leaves, which, though rare, sometimes happens in *rosa*, *anemone*, *monarda*, and others. [As in luxuriant flowers many parts of the natural character are deficient in the whole or in part, they can only be distinguished by the general habit, and by such parts as remain in the natural state; as very often by the calyx, and in polypetalous flowers, the lowest series or rows of petals remain the same, as in *rosa*, *papaver*, *nigella*, &c.]

FLOS MUTILATUS, is such a flower as occasionally is deprived of all, or the greatest part, of the petals, yet bears seeds, as in some species of *tussilago*, *campanula*, &c. This term is opposed to luxuriance, and is supposed by Linnæus to be caused by a defect of heat, though it may also happen by other causes.

Under this head of flowers, may also be mentioned the different sexes.

FLOWERS, in respect to SEX, are distinguished into male, female, hermaphrodite, and neuter. Male flowers are such as have only the stamina or males, as in the classes *monoecia*, *dioecia*, and *polygamia*. Female flowers are such as have only the pistilla or females, as in the same classes *monoecia*, *dioecia*, and *polygamia*. Hermaphrodite flowers are such as have both the stamina and pistilla in the same flower, as in all the other classes: hermaphrodites are also distinguished into male hermaphrodites, when the female is ineffectual; and female hermaphrodites, when the male is ineffectual. Neuter flowers are such as have neither stamina nor pistilla perfect. The plants themselves also take a denomination from the sex of their flowers; as male plants are such as bear male flowers only; female plants are such as bear female flowers only; hermaphrodite plants are such as bear hermaphrodite flowers only. Androgynous (male and female) plants are such as bear both male and female flowers, distinct, upon the same root, as in the class *monoecia*. Polygamous plants are such as bear hermaphrodite flowers, and male or female flowers, or both distinct, on the same or on different roots: if on the same root, the flowers are either male hermaphrodites and female hermaphrodites; or hermaphrodites and male; or hermaphrodites and female, distinct: if on different roots, the flowers are either hermaphrodites and male; hermaphrodites and female; hermaphrodites and both male and female; or are androgynous and male; and sometimes androgynous and male and female on three distinct plants.

VII. The HABIT of plants, by which ancient botanists meant the whole external appearance of every part thereof, whereby they were arranged in their several systems; but by Linnæus it is meant to be the agreement of plants of the same genus or natural order; chiefly in the following circumstances.

Gemmation. The structure and disposition of the bulb, as solid, coated, scaly, stem-bulb. Also of the bud; its origin petioled, stipuled, cortical; its contents leafy, floral, common.

Vernation. The complication of the leaves within the bud, as conduplicate or doubled together; convo-

lute or rolled together; involute or rolled in; revolute or rolled back; imbricated or tiled; equitant or riding; obvolvute or rolled against each other; plaited or folded over; spiral or coiled like a watch-spring, one end in the centre.

Æstivation. The state of the bud in summer, as convolute, imbricated, conduplicate, valved, unequal-valved.

Tortion. The twisting or bending of the parts, as uniform, dissimilar, from the right, from the left, reciprocal, resupine, spiral.

Nuptials. Male, female, androgynous, hermaphrodite.

Semination. The shape and other circumstances of the seed, as tail, wing, tuft, awn, hooks, gluten, curvature. Also of the pericarpium; as berrying, inflation, viscosity, elasticity, structure.

Placentation. The number and disposition of the cotyledons; or if wanting.

Variation. Of colour, size, pubescence, age.

External: plaited, bundled, broad-leaved, curled, awnless.

Internal: mutilated, great-flowered, luxuriant, crested; viviparous, bulb-bearing.

By *variation* or *variety* are meant such differences as are only incidental to vegetables, and are not found constant and unchangeable; that is, where plants raised from the same seed, by some accidental cause differ in form and appearance, from the true character of the species to which they belong; which cause being removed, the plant is restored to its true specific character: and these incidental varieties chiefly arise by difference of soil or culture, in some of the above circumstances. And though it is as necessary to collect varieties under their proper species, as the species under their proper genera; yet it is often more difficult; first, from the difficulty of ascertaining the genus, and secondly, from the variety of confounding the species; and sometimes some part of the specific character itself are also subject to variety, particularly the leaves; though in general the true specific character is constant and unchangeable, arising only from such circumstances wherein plants of the same genus are found to disagree, which distinctions are commonly taken with most certainty, from the following parts, (*viz.*) root, trunk, leaves, fulcra, hybernacle, inflorescence: all which parts have been already explained, except hybernacle.

The HYBERNACULUM, (*winter lodgement*), is that part of a plant which defends the embryo or future shoot from external injuries during the winter; and, according to Linnæus, is either a bulb or a bud.

I. A BULB (*bulbus*), is a large sort of bud produced under ground, placed upon the caudex of certain herbaceous plants, hence called *bulbous* plants; all of which are perennial, that is, perpetuated by their bulbs or ground buds, as well as by seeds: they are therefore improperly called roots, being only the hybernacle of the future shoot. Bulbs are of the following sorts;

1. Squamous; consisting of scales laid over each other like tiles, as in the lily.
2. Solid; consisting of a close substance, as in tulips.
3. Coated; consisting of many coats infolding each other, as in onions.
4. Cauline; produced not only from the sides of the principal bulb, called a *sucker* or *offset*, but from other parts of the stem; as in crow or wild garlic, and in some species of onion (hence called *bulbiferous*); where they are produced at the origin of the umbel of flowers.

II. A Bud (*gemma*), is the embryo of the plant, seated upon the stem and branches, covered with scales. In general there are three sorts of buds:—That containing the flower only, as in poplar, ash, &c. where the leaf-buds and flower-buds are distinct:—That containing the leaves only, as in birch, &c.:—and, That containing both flower and leaves, as in the generality of plants; and these last sometimes contain leaves and male flowers, sometimes leaves and female flowers, sometimes leaves and hermaphrodite flowers.

Annual plants are only renewed from seeds; and several other plants, both trees and shrubs, have no winter buds: It is also observed in hot countries, that few plants have buds; or at least they are without that scaly covering which seems essential to a bud, and constitutes the hybernacle; instead whereof are protruded small feather-like branches from the wings of the leaves, (defence and protection from cold not being necessary); whereas in cold countries most plants have buds, which are wrapped up all the winter, in readiness to greet the approaching spring.

Lastly, What is called the SLEEP of plants, according to Linnæus, happens various ways; as by converging, including, surrounding, fortifying, conduplicating, involving, diverging, depending, inverting, imbricating. This disposition in plants is very remarkable in chickweed, pimpernell, dandelion, goat's-beard, &c. which

expand their flowers only at certain times of the day, and shut them up at the approach of night or a storm: which shows the great care nature takes to protect and invigorate her feeble offspring; and from hence may often be prognosticated a change of weather. In many plants, not only the flowers, but the young shoots, are defended from external injuries, by the nearest leaves converging and inclosing the tender rudiments.

The SEXUAL METHOD of reducing plants to classes, genera, and species, is founded upon the supposition that vegetables propagate their species in a manner similar to that of animals. Linnæus endeavours to support this hypothesis by the many analogies that subsist between plants and animals, which shall be more particularly pointed out in the next section. It is from this circumstance that Linnæus's system of botany has got the name of the *sexual system*. The names of his classes, orders, &c. are all derived from this theory. He calls the stamina of flowers, as we have seen, the *males*, or the male parts of generation; the pistils he calls *females*, or the female parts of generation; and plants whose flowers contain both male and female parts, are said to be *hermaphrodites*, &c. His classes, orders, and genera, are all derived from the number, situation, proportion, and other circumstances attending these parts, as will appear from the following

SCHEME of the SEXUAL SYSTEM, or TABLE of the CLASSES.

- Plants celebrate their nuptials
- Either PUBLICLY, i. e. have visible flowers:
 - Monoclinia, males and females in the same bed:—i. e. The flowers are all hermaphrodite, having stamina and pistils in the same flower.
 - Diffinitas, the males or stamina unconnected with each other.
 - Indifferentissimus, the males or stamina having no determinate proportion betwixt each other as to length.
 1. MONANDRIA, i. e. one male or stamen in a hermaphrodite flower.
 2. DIANDRIA, — two males or stamina.
 3. TRIANDRIA, — three males.
 4. TETRANDRIA, — four males.
 5. PENTANDRIA, — five males.
 6. HEXANDRIA, — six males.
 7. HEPTANDRIA, — seven males.
 8. OCTANDRIA, — eight males.
 9. ENNEANDRIA, — nine males.
 10. DECANDRIA, — ten males.
 11. DODECANDRIA, — eleven males.
 12. ICOSANDRIA, — twenty, or more males inserted into the calyx, and not into the receptacle.
 13. POLYANDRIA, — all above twenty males inserted into the receptacle.
 - Subordinatio, two of the males or stamina uniformly shorter than the rest.
 14. DIDYNAMIA, — four males, two of them uniformly shorter than the other two.
 15. TETRADYNAMIA, — six males, two of which are uniformly shorter than the rest.
 - Affinitas, the males or stamina either connected to each other, or to the pistillum.
 16. MONDELPHIA, the males or stamina united into one body by the filaments.
 17. DIADELPHIA, the stamina united into two bodies or bundles by the filaments.
 18. POLYADELPHIA, the stamina united into three or more bundles by the filaments.
 19. SYNGENESIA, the stamina united in a cylindrical form by the antheræ.
 20. GYNANDRIA, the stamina inserted into the pistillum.
 - Diclinia, males and females in separate beds; i. e. plants that have male and female flowers in the same species.
 21. MONOECIA, male and female flowers in the same plant.
 22. DIOECIA, male flowers in one plant, and females in another, of the same species.
 23. POLYGAMIA, male, female, and hermaphrodite flowers in the same species.
 - Or CLANDESTINELY, i. e. whose parts of fructification are invisible.
 24. CRYPTOGRAMIA, the flowers invisible, so that they cannot be ranked according to the parts of fructification.

These 24 CLASSES comprehend every known genus and species. It is an easy matter to class a plant belonging to any of the first 11 classes, as they all depend on the number of stamina or male parts, without regard to any other circumstance: only it is to be observed, that the 11th class, *Dodecandria*, although its title is expressive of 12 stamina only, consists of such plants as are furnished with any number of stamina from 11 to 19 inclusive. The reason of the chasm in the classes from 10 to 12 stamina, is, that no flowers have yet been found with only 11, so as to form a class. *Reseda* hath sometimes only 11, but oftener more, yet never exceeding 15. The 12th class requires more attention than the preceding. When the stamina amount to above 20, a tyro will be apt to imagine that the plant belongs to the polyandria class. In reducing plants of this kind to their classes, particular regard must be had to the insertion of the stamina. If they are inserted into the calyx or cup, the plant belongs to the icosandria class; if to the receptacle or basis of the flower, it belongs to the polyandria. This distinction it is very necessary to observe, as the fruits of the latter class are frequently poisonous.

The 14th class is likewise in danger of being confounded with the 4th. In the 4th, the number of stamina is the same with that of the 14th: But in the 14th, two of the stamina are uniformly much shorter than the other two; at the same time each particular stamen belonging to the different pairs stands directly opposite to one another.

The 15th class may be mistaken for the 6th, as they consist of the same number of stamina. But in the 15th, four of the stamina are uniformly longer than the other two; and these two are always opposite to each other.

ORDERS.

In the first 13 classes, the ORDERS, which are inferior divisions, and lead us a step nearer the genus, are taken from the pistils or female parts, in the same manner as the classes from the stamina: Monogynia, digynia, trigynia, tetragynia, &c. i. e. one, two, three, four, &c. female parts. When the pistils or female parts have no stalk or filament like the stamina, they are numbered by the stigmata or tops of the pistils, which in that case adhere to the capsule in the form of small protuberances, as may be observed in the flowers of the poppy, &c.

The Orders of the 14th class are derived from a different source. The plants belonging to it have their seeds either inclosed in a capsule, or altogether uncovered. Hence they naturally admit of a division into the following orders, viz. *gymnospermia*, comprehending such as have naked seeds; and *angiospermia*, which comprehends such as have their seeds covered, or inclosed in a capsule.

The 15th class is divided into two Orders, viz. the *filiculosa*, or those which have a short siliqua or pod; and the *siliculosæ*, or those which have a longer siliqua.

The Orders of the 16th, 17th, 18th, and 20th classes, are taken from the number of stamina; e. g. monodelphia *pentandria*, *decandria*, *polyandria*, &c.

The 19th class consists of plants whose flowers are compounded of a great number of small flowers or floscules inclosed in one common calyx. The Orders of this class are,

Polygamia equalis, or such whose floscules are all furnished with stamina and pistils.

Polygamia spuria, comprehends those which have hermaphrodite floscules in the disk, and female floscules in the margin. This circumstance is made the foundation of the three following orders. 1. *Polygamia superflua*, includes all those whose hermaphrodite flowers in the disk are furnished with stigmata, and bear seed; and whose female flowers in the radius likewise produce seeds. 2. *Polygamia frustranea*, include such as have hermaphrodite seed-bearing floscules in the disk; but whose floscules in the radius, having no stigmata, are barren. 3. *Polygamia necessaria*, is the reverse of the former: the hermaphrodite flowers in the disk want stigmata, and are barren; but the female floscules in the radius are furnished with stigmata, and produce seeds.

Polygamia segregata, many floscules inclosed in one common calyx, and each of the floscules likewise furnished with a perianthium proper to itself.

Monogamia. This order consists only of seven genera, viz. the strumphia, seriphium, corymbium, jassione, lobelia, viola, and impatiens; none of which have properly compound flowers, but are ranked under this class purely from the circumstance of having their stamina united by the antheræ.

The Orders of the 21st class are partly taken from the number of stamina, and partly from the names and characters peculiar to some of the other classes; e. g. monœcia *triandria*, monœcia *syngensia*, monœcia *gynandria*.

The Orders of the 22d class are founded upon the number, union, and situation of the stamina in the male flowers.

The Orders of the 23d are all taken from classical characters; e. g. polygamia *monœcia*, polygamia *diœcia*, and polygamia *triœcia*.

The 24th class is divided into the four following Orders: 1. *Filices*, comprehending all plants that bear their seeds in the back or edges of the leaf, and those that are called *capillary plants*. 2. *Musci*, which comprehends all the moss kind. 3. *Alge*, including the lichens, fuci, and many others whose parts of fructification are either altogether invisible or exceedingly obscure. 4. *Fungi*, comprehending all the mushroom tribe.

TABLE of the ORDERS.

Orders.

CLASS I. consists of 2:	Monogynia, Digynia; comprehending 18 genera.
II. 3:	Monogynia, Digynia, Trigynia; 35 genera.
III. 3:	Monogynia, Digynia, Trigynia; 76 genera.
IV. 3:	Monogynia, Digynia, Tetragynia; 85 genera.
V. 6:	Monogynia, Digynia, Trigynia, Tetragynia, Pentagynia, Polygynia; 264 genera.
VI. 5:	Monogynia, Digynia, Trigynia, Tetragynia, Polygynia; 82 genera.
VII. 4:	Monogynia, Digynia, Tetragynia, Heptagynia; 7 genera.

CLASS.

Orders.

CLASS VIII. consists of 4: Monogynia, Digynia, Trigynia, Tetragynia; 45 genera.

IX.	3:	Monogynia, Trigynia, Hexagynia; 6 genera.
X.	5:	Monogynia, Digynia, Trigynia, Pentagynia, Decagynia; 94 genera.
XI.	5:	Monogynia, Digynia, Trigynia, Pentagynia, Dodecagynia; 33 genera.
XII.	5:	Monogynia, Digynia, Trigynia, Pentagynia, Polygynia; 29 genera.
XIII.	7:	Monogynia, Digynia, Trigynia, Tetragynia, Pentagynia, Hexagynia, Polygynia; 77 genera.
XIV.	2:	Gymnospermia, Angiospermia; 102 genera.
XV.	2:	Siliquosa, Siliculosa; 32 genera.
XVI.	7:	Triandria, Pentandria, Octandria, Decandria, Endecandria, Dodecandria, Polyandria; 36 genera.
XVII.	4:	Pentandria, Hexandria, Octandria, Decandria; 56 genera.
XVIII.	3:	Pentandria, Icosandria, Polyandria; 12 genera.
XIX.	6:	Polygamia æqualis, Polygamia superflua, Polygamia frustranea, Polygamia necessaria, Polygamia fegregata, Monogamia; 116 genera.
XX.	9:	Diandria, Triandria, Tetrandria, Pentandria, Hexandria, Octandria, Decandria, Dodecandria, Polyandria; 33 genera.
XXI.	11:	Monandria, Diandria, Triandria, Tetrandria, Pentandria, Hexandria, Hep- tandria, Polyandria, Monadelphina, Syngenesia, Gynandria; 80 genera.
XXII.	14:	Monandria, Diandria, Triandria, Tetrandria, Pentandria, Hexandria, Octandria, Enneandria, Decandria, Dodecandria, Polyandria, Monodelphia,

		Syngenesia, Gyrandria; 55 genera.
XXIII.	3:	Monœcia, Diœcia, Tricœcia; 34 genera.
XXIV.	4:	Filices, Musci, Algæ, Fungi; 51 genera.
		Palmæ.

These last, though capable of being arranged in the several classes of the system, yet, on account of their singular structure, have been placed in an appendix, containing such genera as have a spadix and spatha, *i. e.* whose flowers and fruit are produced on that particular receptacle or seat called a *spadix*, protruded from a common calyx in form of a sheath called *spatha*. This order consists of trees and shrubs only. These have always a simple stem, not branched, bearing leaves at the top, resembling those of fern, being a composition of a leaf and a branch, called *frondes*; and the corolla hath always three petals, or three deep divisions. The known genera are 10 in number.

G E N E R A.

HAVING thus explained the distinctions of classes and orders, the next step is the investigation of the genus or family.

The essence of every vegetable, says Linnæus, consists in the fructification (or mode of fruit-bearing), and the essence of the fructification consists in the flower and fruit; the essence of the flower consists in the antheræ and stigma, and the essence of the fruit consists in the seed. Hence, in his sexual theory, he necessarily makes the flower and fruit the foundation of his generic distinctions. These are generally composed of seven parts; the CALYX, the COROLLA, the STAMINA, the PISTILLUM, the PERICARPIUM, the SEMINA, the RECEPTACULUM; and the presence or absence, the number, figure, proportion, and situation of the several parts, constitute the genus. But as there are few genera wherein all the parts of the *natural* character are constant in every one of the species, it is necessary to fix upon such circumstances as are constant in both genus and species, and call those the *essential* or ruling character, as well the more easily to distinguish one genus from another, as to regulate and fix the several species and their varieties to their respective genera; for which purpose, in some cases, Linnæus was obliged to have recourse to the *necesarium*, afterwards explained. The first four parts of the fructification are properly parts of the flower, and the last three are parts of the fruit.

I. The CALYX (A), a *cup*, is the termination of the outer bark (*cortex*) of a plant. Its chief use is to inclose, support, and protect the other parts of the fructification. When present, it is seated on the receptacle;

(A) The calyx is considered a part of the flower, though it more generally attends, and is permanent with, the fruit, as in the class didynamia, and most other plants; yet sometimes it drops before or with the corolla, and before the fruit is ripe, as in the class tetradynamia, and many other plants. It is also considered a part of the flower, as there is no instance of its coming out after the plant has done flowering; yet in patagonula it is observed to grow to a much larger size in the fruit than it had in the flower: In some plants there is none, or scarce perceptible; in others, it is only a rim or border (*margo*). The germen is also considered as part of the flower, as being the base of the pistillum, though it afterwards becomes the seed-vessel.

ceptacle: and is distinguished by its figure: by the number, division, and shape of its leaves, or segments; and by the following names, according to the circumstances with which it is attended.

PERIANTHIUM, (*surrounding the flower*), when its station is close to, and surrounds the other parts of the fructification, and it is then called the *perianthium of the fructification*: If it includes many floscules, as in scabiosa, and other aggregate and compound flowers, it is called a *common perianthium*: if it includes only one floscule, in such flowers it is called a *proper perianthium*: if it includes the stamina, and not the germen, it is the perianthium of the *flower*, and is said to be *above*, as in lonicera, ribes, campanula, &c.: if it includes the germen, but not the stamina, it is the perianthium of the *fruit*, and is said to be *below*, as in linnea and morina, each of which have two calyxes and two receptacles above each other, one of the flower and the other of the fruit, and may therefore serve as instances in both cases.

INVOLUCRUM, (*a cover*), when stationed at the foot of an umbel, below the common receptacle, and at a distance from the flower: it is called *universal*, if placed under the universal umbel; and *partial*, if placed under a partial umbel.

AMENTUM, (*a thong*), meaning a *catkin*, when it consists of a great number of chaffy scales, disposed along a slender axis or common receptacle, which, from its resemblance to a cat's tail, hath obtained the name *catkin*; and these flowers have generally no petals: Sometimes the same amentum supports both male and female flowers, distinct, on the same plant, as in carpinus, &c.; sometimes the male and female flowers are removed from each other on the same plant, and the amentum supports only the male flowers, and the female flowers are inclosed by a perianthium, as in corylus, juglans, fagus, &c.: and sometimes an amentum only supports male flowers on one plant, and female flowers on another plant, as salix, populus, &c.

SPATHA, (*a sheath*), being a sort of calyx growing from the stalk, bursting lengthways, and protruding a spadix or *receptacle*, supporting one or more flowers, which have often no perianthium; and consists either of one leaf, with a valve or opening on one side only, as in narcissus, galanthus, and the greater number of spathaceous plants; or of two leaves, with two valves or openings, as in stratiotes, &c.; or is imbricated, as in musa, &c. with one or two valves.

GLUMA, (*a husk*); this chiefly belongs to corn and grasses, consisting of one, two, three, or more valves, folding over each other like scales, and frequently terminated by a long, stiff, pointed prickle, called the *arista* (beard or awn).

CALYPTRA, (*a veil or covering*), the proper calyx to mosses; it is placed over the antheræ of the stamina, resembling an extinguisher, a hood, or monk's cowl.

VOLVA, from its *infolding* or *involving*, is the proper calyx to fungusses, being membranaceous, and surrounding the stalk or pillar before their expansion.

[It is often difficult to distinguish the calyx from the bractæ, or floral leaves, which are found on many plants, situated on the flower-stalks; and are often so near to the lower parts of the fructification as to be confounded with, and mistaken for, the calyx, as in tilia, helleborus, passiflora, &c. (in helleborus the calyx

is wanting): but they may be best distinguished by this rule; the floral leaves differ in shape and colour from the other leaves of the plant, but are commonly of the same duration; whereas the calyx always withers when the fruit is ripe, if not before.]

II. The COROLLA, (*a wreath or little crown*), is the termination of the inner bark (*liber*) of the plant; which accompanies the fructification, in the form of leaves variously coloured: it is generally seated on the receptacle, sometimes on the calyx; serving as an inner work of defence to the part it incloses; as the calyx, which is usually of stronger texture, does for an outer work. The leaves of which the corolla are composed are called *petals*, by the number, division, and shape of which it is distinguished. It is said to be *below*, when it includes the germen, and is attached to the part immediately below it, as in salvia, borago, convolvulus, primula, &c.; and it is said to be *above*, when it is placed above the germen, as in lonicera, ribes, cratægus, &c. In respect to duration, the corolla either continues till the fruit is ripe, as in nymphæa; or falls off at the first opening of the flower, as in actæa, thalictrum; or falls off with the stamina and other parts of the flower, as in most plants; or does not fall, but withers, as in campanula, cucumis, and others.

There is also a part which Linnæus says principally belongs to the corolla, as an appendage to the petals: which he calls the *nectarium* (from nectar the fabled drink of the gods); and is that part containing the honey, which is the principal food of bees and other insects. But though, in such plants where it is found, it may more commonly be attached to the corolla, and be then most evident; yet it is almost as often attached to other parts of the fructification: Linnæus therefore chiefly makes use of it as an essential character in many of the genera, as being less variable than his other distinctions; and observes, that when it is distinct from the petals, that is, not united with their substance, those plants are generally poisonous: The tube or lower part of monopetalous flowers, he considers as a true nectarium, because it contains a sweet liquor. But as it affords very singular varieties in other instances, it hath obtained the following distinctions.

1. CALYCINE NECTARIA, such as are situated upon, and make a part of, the calyx; as in tropæolum, monotropa, &c.

2. COROLLACEOUS NECTARIA, such as are attached to the corolla. These are called *calcarate* (from *calcar*), when they resemble a spur or horn: which are either on flowers of one petal, as in valeriana, antirrhinum, &c.; or on flowers of many petals, as in orchis, delphinium, viola, fumaria, &c. Or the nectarium lies within the substance of the petals, as in fritillaria, lilium, berberis, iris, ranunculus, &c.

3. STAMINEOUS NECTARIA, such as attend the stamina, and are either seated upon the antheræ, as in adenantha; or upon the filaments, as in laurus, dictamnus, campanula, &c.

4. PISTILLACEOUS NECTARIA, such as accompany the pistillum, and are placed upon the germen, as in hyacinthus, butomus, cheiranthus, hesperis, &c.

5. RECEPTACULACEOUS NECTARIA, such as join to the receptacle, as in polygonum, sedum, sempervivum, &c.

6. NECTARIA, that crown the corolla, that is, when placed in a series or row within the petals, though entirely unconnected with their substance, as in *passiflora*, *lychnis*, *filene*, &c.; and in this situation it often resembles a cup, as in *narcissus*, &c.

7. NECTARIA of singular construction, being such as cannot properly be placed under any of the foregoing distinctions, as in *amomum*, *curcuma*, *salix*, *urtica*, &c.

The proper use of the nectarium, and why it should have such very different situations, is not yet known: but as it is found in most plants, there is great reason to believe it an essential part in the fructification, though not always perceptible.

III. The STAMINA, (*threads* or *chives*); the males of the flower, proceeding from the wood of the plant, each stamen consisting of two parts, viz. the filament and the antheræ. In most flowers they are placed upon the receptacle, within the corolla, and round the germen; and are chiefly distinguished by number.

The FILAMENT (from *filum*, a thread), is the thread-shaped part of the stamen, serving as a footstalk to elevate the antheræ, and is sometimes found to have jags or divisions (*laciniæ*); which are either two, as in *salvia*; three, as in *fumaria*; or nine, as in the class *diadelphia*. They are also distinguished by their form or figure, as awl-shaped, thread-shaped, hair-like, spiral, revolute, &c.: by their proportion, as equal, unequal, irregular, long, or short: and by their situation, being generally opposite to the leaves or divisions of the calyx, and alternate with the petals; that is, when the divisions of the calyx are equal in number to the petals, and to the stamina. In monopetalous flowers they are generally inserted into the corolla; but scarcely ever in flowers of more than one petal, but into the receptacle: Yet in the class *icofandria* they are inserted into the calyx or corolla (though the flowers have many petals), as also in a few other plants. But in the class *polyandria*, and most other polypetalous plants, they are inserted into the receptacle, like the calyx and corolla. The class *gynandria*, however, is an exception to the above rules, where the stamina are placed upon the pistillum, or female part of the flower; and are sometimes without filaments.

The ANTHERA (from *anthos*, a flower), emphatically so called from its great utility in the fructification, is the top or summit of the filament, containing the impregnating pollen or farina; and is either one to each filament, as in most plants; or one common to three filaments, as in *cucurbita*, &c.; or one common to five filaments, as in the whole class *syngenesia*: or sometimes there are two antheræ to each filament, as in *ranunculus* and *mercurialis*; three to each filament, as in *fumaria*; five to three filaments, as in *bryonia*; or five to each filament, as in *theobroma*. The anthera is also distinguished by its form or figure, as oblong, round, angular, &c. It also consists of one or more cells, which burst differently in different plants; either on the side, as in most plants; on the top; or from the top to the base. It is also fastened to the top of the filament, either by its base, as in most plants, or horizontally by its middle, to the top of the filament, so poised as to turn like a vane (*versatilis*): or it is fixed by its side, leaning to the top of the filament,

then called incumbent: or it sometimes grows to the nectarium, as in *costus*; to the receptacle, as in *arum*; to the pistillum, as in the class *gynandria*.

IV. The PISTILLUM, or the female of the flower, proceeding from the pith of the plant. It is that erect column which is generally placed in the centre of the flower, amidst the stamina; and consists of three parts, the germen, the style, and the stigma.

1. GERMEN (a *bud*), is the base of the pistillum, supporting the style. After a process of nature, it becomes a seed-vessel, and may therefore be considered as the rudiment of the pericarpium. It is distinguished by its shape, number, and situation; and is said to be *above* or *below*, according to its situation above or below the attachment of the corolla.

3. The STYLE (from *stylus*, a pillar), is that part which elevates the stigma from the germen, in order to receive the influence of the stamina, and to convey the effects down to the germen as through a tube. It is distinguished either by its number, which, when present (or when absent, the number of stigmata), gives rise to most of the orders, and are called so many females; or by its divisions (*laciniæ*), being double, treble, or quadruple, &c. though joined at the base; or by its length, being longer, shorter, or equal with the stamina; or by its proportion, being thicker or thinner than the stamina; or by its figure, being angular, cylindric, awl-shaped, bent, &c.; or by its situation, being generally on the top of the germen, tho' in some instances supposed to be both above and below, as in *capparia* and *euphorbia*; unless the lower part in these genera be considered as the extension of the receptacle: It is also often placed on the side of the germen, as in *hirtella*, *furiana*; also in *rosa*, *rubus*, and the rest of the plants in the class and order *icofandria polygynia*. With respect to duration, it generally falls with the other parts of the flower; but in some plants is permanent, and attends the fruit to its maturity, as in the class *tetradynamia*. In flowers which have no style, the stigma adheres to the germen.

3. The STIGMA (a *mark*), when single, is generally placed like a head on the summit of the style: when several, they are either placed on the top, or regularly disposed along the side; and covered with a moisture, to retain the pollen of the antheræ. It is distinguished either by its number, being single in most plants; by its divisions; by its figure or shape; by its length; by its thickness; and by its duration, as in most plants it withers when the germen is become a seed-vessel; in some it is permanent, as in *papaver*.

V. The PERICARPIUM, (*round the fruit*); the germen grown to maturity, and now become a matrix or seed-vessel. All plants, however, are not furnished with a seed-vessel, as in *corylus*, &c. In many, it is supplied chiefly by the calyx, which converging incloses the seeds till they arrive at maturity; as is the case with the rough-leaved plants, and the labial and compound flowers of the several classes *pentandria*, *didynamia*, and *syngenesia*. Sometimes the receptacle supplies the office of seed-vessel, as in *gundelia*; and sometimes the nectarium, as in *carex*. The pericarpium is situated at the receptacle of the flower, either above or below, or both, as in *saxifraga* and *lobelia*: and is distinguished by the following appellations, according to its different structure.

I. CAPSULA

1. **CAPSULA** (a *little chest or casket*), which is frequently succulent whilst green; but when ripe, it is a dry husky seed-vessel, that cleaves or parts in some determinate manner to discharge its contents; and by some sort of elastic motion, the seeds are often darted forth with considerable velocity, as in dictamnus, &c. It opens also various ways, either at the top, as in most plants; at the bottom; at the side; horizontally across the middle; or longitudinally; and if it is articulated or jointed, it opens at each of the joints, which contains a single seed. It is further distinguished externally, by its number of valves; and internally, by the number of its cells or divisions, wherein the seed is inclosed; as also by its shape and substance.

2. **SILIQUA** (a *pod*), which is a pericarpium of two valves; but as some are long, others round or broad, Linnæus thought it necessary to distinguish them by their form into *siliqua* and *silicula*; which gives rise to the two orders in the class tetradynamia. The *siliqua* means a long pod, being much longer than broad, as in brassica, sinapis, &c.; the *silicula* (a little *siliqua*), is a roundish pod, either flat or spherical, and the length and breadth nearly equal, as in lunaria, draba, thlaspi, &c. In both, the apex, which had been the style, is often so long beyond the valves, as to be of equal length with the pod; and the seeds in both are fastened alternately by a slender thread, to both the futures or joinings of the valves.

3. **LEGUMEN** (*pulse*), is also a pod, and is likewise a pericarpium of two valves, wherein the seeds are fastened to short receptacles along the upper future only, on each side, alternate: this chiefly belongs to the papilionaceous or butterfly flowers of the class diadelphia.

4. **FOLLICULUS** (a *little bag*, in former editions called *conceptaculum*), is a pericarpium of one valve only, opening lengthwise on one side, and the seeds not fastened to the future, but to a receptacle within the fruit, as in apocynum, asclepias, &c.

5. **DRUPA** (from *drupa*, unripe olives), is a pericarpium that is succulent, or pulpy, having no valve or external opening. It contains within its substance a stone or nut; that is, a seed inclosed with an hard ligneous crust, as olea, cornus, juglans, prunus, amygdalus, &c.: and when the drupa is seated below the calyx, it is furnished with an umbilicus like the pomum.

6. **POMUM** (an *apple*), is also a pericarpium that is succulent or pulpy, and without valve; but containing in the middle a membranous capsule, with several cells or cavities containing the seeds; and at the end opposite to the footstalk there is generally a small cavity called *umbilicus* (the navel), from its resemblance to that part in animals, and which was formerly the calyx, seated above the fruit, and persistent, as in pyrus, cucumis, cucurbita, &c.

7. **BACCA** (a *berry*), is also a pulpy pericarpium without valve, inclosing one or more seeds, which have no membranous capsule or covering, but are disposed promiscuously through the pulp, as in solanum, &c. and are generally placed on footstalks attached to receptacles within the pulp, as in ribes, &c. The berry also admits of the following distinction: It is said to be *proper*, when it is a true pericarpium formed of a germen; and *improper*, when it is formed from other

parts of the fructification; as in morus, rosa, juniperus, taxus, &c. A large succulent calyx becomes a berry; and in juniperus the three petals become the umbilicus; in poterium the berry is formed of the tube of the corolla; in fragaria, &c. it is formed of the top of the receptacle; in rubus, &c. it is formed from a seed, which is the receptacle of the berry; in ruscus, &c. it is inclosed within and is a part of the nectary. The berry is commonly either round or oval, and is frequently furnished with an umbilicus, as in ribes, &c.: It does not naturally open to disperse the seeds like the capsule, that office being performed by birds and other animals.

8. **STROBILUS** (a *cone*), is a pericarpium formed of an amentum, being a seed-vessel composed of woody scales placed against each other in the form of a cone, opening only at the top of the scales, being firmly fixed below to a sort of axis or receptacle, occupying the middle of the cone; as in pinus, thuya, cupressus, &c.

VI. **SEMINA** (the *seeds*). A *seed* is the essence of the fruit of every vegetable; and is defined by Linnæus to be "a deciduous part of the plant, containing the rudiments of a new vegetable, fertilized by the sprinkling of the pollen;" and they are distinguished according to number, shape, texture, appendage, &c. A seed, properly so called, consists of the five following parts; to which is added the nux and propago.

1. The **CORCULUM**, (from *cor*, a heart), is the essence of the seed, and principle of the future plant; and consists of two parts, viz. plumula and rostellum. *Plumula* is the scaly part and essence of the corculum, which ascends and becomes the stem or trunk of the plant: it extends itself into the cavity of the lobes or cotyledons, and is terminated by a small sort of branch resembling a feather. *Rostellum* is the plain or simple part of the corculum, which descends into the earth, and becomes the root: its form is that of a small beak, placed without the lobes, and adhering internally to the plumula.

2. The **COTYLEDONS** (from *cotyledon*, the hollow of the huckle-bone), are the thick porous side-lobes of the seed, consisting of farinaceous matter, and which involve and for some time furnish nourishment to the embryo plant, but wither and die away when it becomes strong. If a plant be cut below the cotyledons, it will scarce ever put out fresh leaves, but withers and decays; if it is cut above the cotyledons, it generally shoots out afresh, and continues to grow: Therefore, if plants whose cotyledons rise above ground, as turnips, &c. be cut or eat to the ground by cattle, they decay; but where the cotyledons remain below ground, as in grasses, and are cut or eat to the ground, they will shoot out afresh. The cotyledons are also called the *feminal* or *seed* leaves: some plants have only one, as in grasses and in cuscuta, &c.; others two, as in vicia, &c.; linum hath four; cupressus hath five; and pinus, Linnæus saith, hath ten. The cotyledons in mushrooms, ferns, and mosses, are not sufficiently ascertained to know if they have any.

3. The **HILUM** (the black spot on a bean, called the *eye*), is the external mark or scar on the seed, where it was fastened within the pericarpium.

4. The **ARILLUS**, a term used to express the proper exterior coat or covering of the seed; which falls off spontaneously, and is either cartilaginous or succulent.

lent: yet seeds are said to be *naked*, when not inclosed in any sort of pericarpium, as in the class and order didynamia gymnospermia.

5. The CORONULA, is either a little sort of calyx adhering to the top of the seed, like a little crown, and assisting to disperse it by flying, as in scabiosa, knautia, &c. where the little calyx of the floret becomes the crown of the seed: Or a down; which is either feathery, as in valeriana, leontodon, gnaphalium, &c.; or is hairy, as in tussilago, senecio, hieracium, &c. [This down has generally been thought intended to disperse the seeds; yet as it frequently breaks off when those have flown to some distance, and is seen flying alone, some have imagined that the down is only intended as a defence of the seed till arrived at maturity.] —The coronula is also either sitting (*sessilis*), that is, attached close to the seed, as in hieracium, &c.; or footstalked (*stipitatus*), by a thread elevating and connecting the crown or tuft with the seed, as in lactuca, crepis, &c. Some seeds are also furnished with a wing, a tail, a hook, an awn, &c. all coming under the term *coronula*, and tending either to disperse or fix the several seeds to which they belong. Some seeds are also furnished with an elastic force, in order to disperse them; which is either in the calyx, as in oats and some others; in the pappus, as in centurea-crupina; or in the capsule, as in geranium, fraxinella, spurting cucumber, &c. Other seeds, especially those whose pericarpium is a berry, as also the nutmeg and other nuts, are dispersed by birds and other animals.

NUX (*Nut*), a seed inclosed in a hard woody substance, called the *shell*, which is one-celled, two-celled, &c. and the inclosed seed is called the *kernel*.

PROPAGO. The seed of a moss not coming under the above description, Linnæus calls *Propago* (a *slip* or *shoot*); which hath neither coat nor cotyledon, but consists only of a naked plumula where the rostellum is inserted into the calyx of the plant.

VII. The RECEPTACULUM is the base which receives, supports, and connects the other parts of the fructification: but it is only mentioned by Linnæus (in his *Gen. Pl.*) when it can be introduced as a character varying in shape and surface, as principally in the class syngenesia. It hath the following distinctions.

PROPER, when it supports the parts of a single fructification only: When it is a base to which only the parts of the flower are joined, and not the germen, it is called a *receptacle of the flower*; in which case, the germen being placed below the receptacle of the flower, hath a proper base of its own, which is called the *receptacle of the fruit*: And it is called a *receptacle of the seeds*, when it is a base to which the seeds are fastened within the pericarpium. In some simple flowers, where the germen is placed above the receptacle of the flower, the fruit hath a separate receptacle, as in magnolia, uvaria, &c. in which genera the numerous germina are seated upon a receptacle rising like a pillar above the receptacle of the fructification.

COMMON, when it supports and connects a head of flowers in common; as in the amentum, and other aggregate flowers.

UMBELLA, which Linnæus calls a *receptacle*. See aggregate flowers, under the head of INFLORESCENCE, above, p. 427.

CYMA (a *sprout*), is also called a *receptacle*. *Ibid.*

RACHIS (the *back-bone*); a filiform receptacle, collecting the florets longitudinally into a spike, in many of the glumose flowers, as wheat, barley, rye, &c.

SPADIX, anciently only signified the receptacle of a palm (*phœnix*) issuing out of a spatha, and branched; but now every flower-stalk that is protruded from a calyx called *spatha*, is denominated a *spadix*, as in narcissus, &c.

When all the above parts are understood, the Genus may be easily investigated. But in order still further to assist the young botanist, we shall give a systematic description of a few common plants belonging to different classes. [The numbers refer to the figures in the subjoined *Explanation of the Plates*.]

DIANDRIA MONOGYNIA.

VERONICA, OR SPEEDWELL.

The CALYX is a perianthium (18) divided into four parts or segments, and persistent (*i. e.* does not fall off till the seeds are ripe); the segments are sharp and lance-shaped.

The COROLLA (11) consists of one rotated petal; the *tubus* (11) is about the same length with the calyx; the *limbus* (11) is plain, and divided into four oval segments, the lowest of which is narrower than the rest, and the one immediately opposite broader.

The STAMINA (12) are two, narrower below, and inclined upwards; the antheræ (12) are oblong.

The PISTILLUM (12) has a compressed germen (12), a filiform or thread-like stylus (12), about the same length with the stamina, and a little declined to one side: the stigma (12) is simple.

The PERICARPIUM (12) is a heart-shaped capsule, compressed at the top, and having two cells or partitions, and four valves.

The SEEDS are roundish and numerous.

ICOSANDRIA POLYGAMIA.

FRAGARIA, OR STRAWBERRY.

The CALYX is a perianthium consisting of one plain leaf, divided into ten segments, each alternately narrower.

The COROLLA has five roundish open petals inserted into the calyx.

The STAMINA are 20 in number, subulated or tapering, shorter than the corolla, and inserted into the calyx. The antheræ are lunulated, or shaped like a crescent.

The PISTILLUM consists of many small germina collected into a little head or knob. The styli are simple, and inserted into the sides of their respective germina. The stigmata are simple.

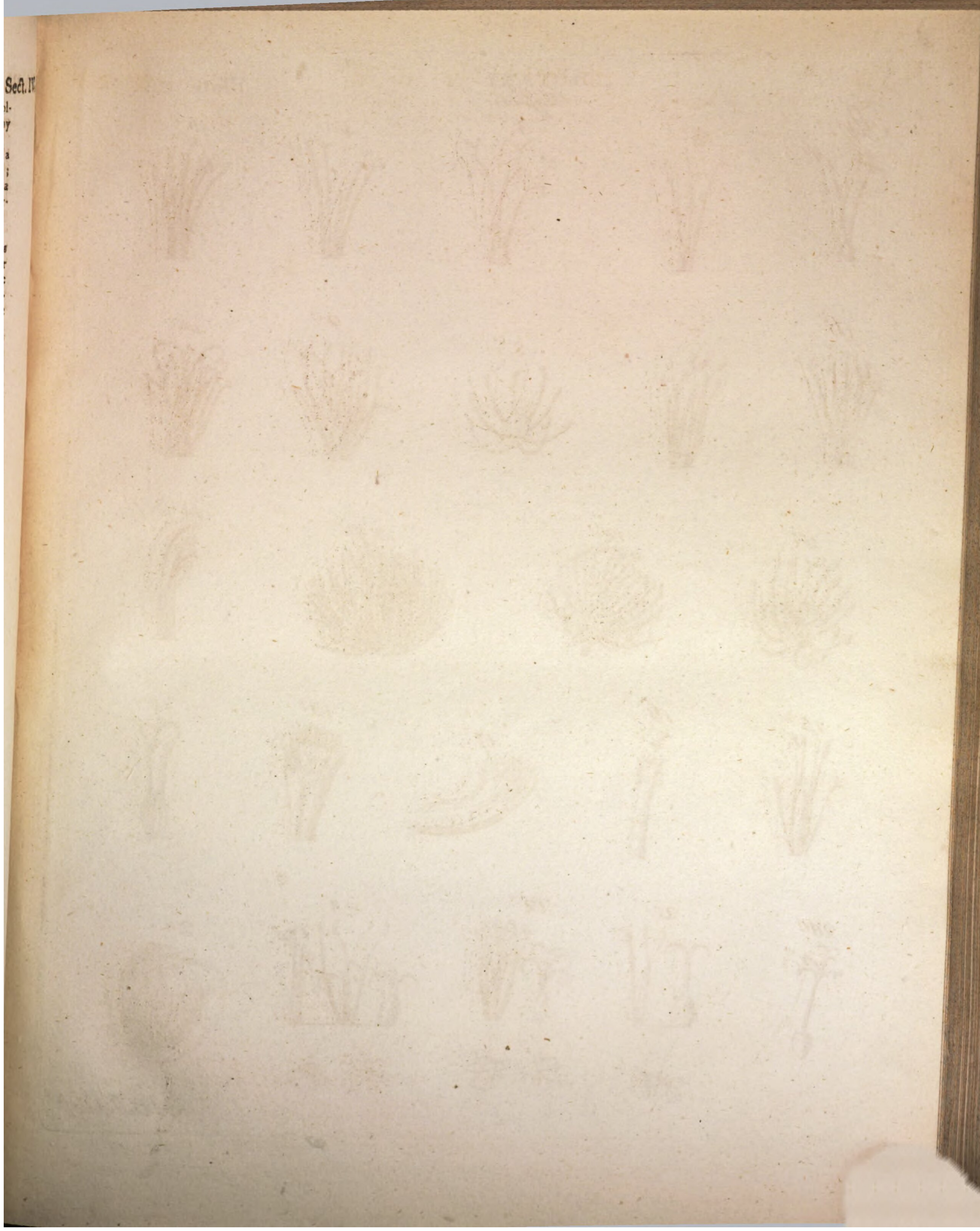
The PERICARPIUM is wanting in this plant. But the common receptacle of the seeds, which supplies the place of a pericarpium, is a roundish oval berry, plain at the base, pretty large, soft, pulpy, coloured, and deciduous, *i. e.* falls off before the seeds be ripe.

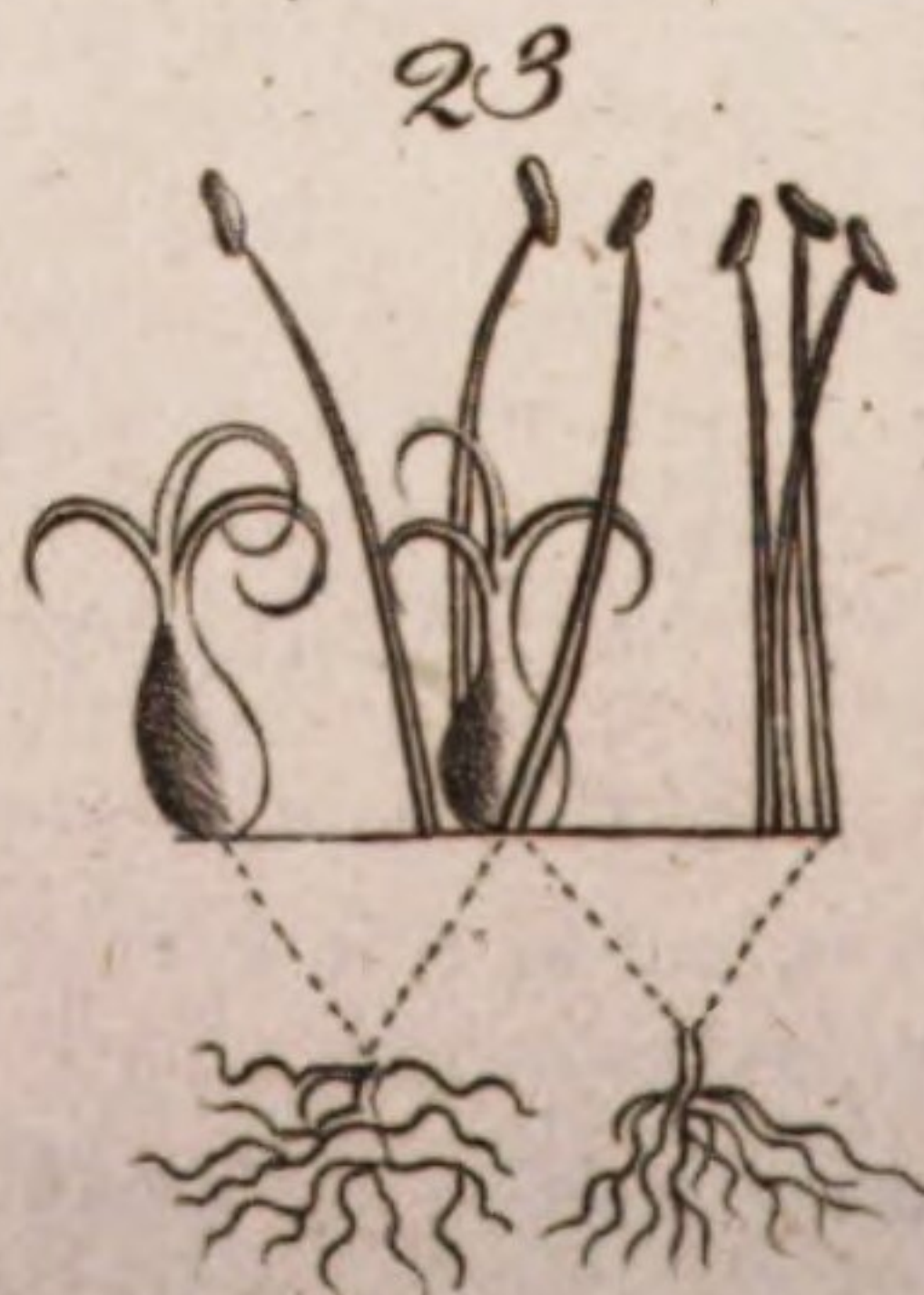
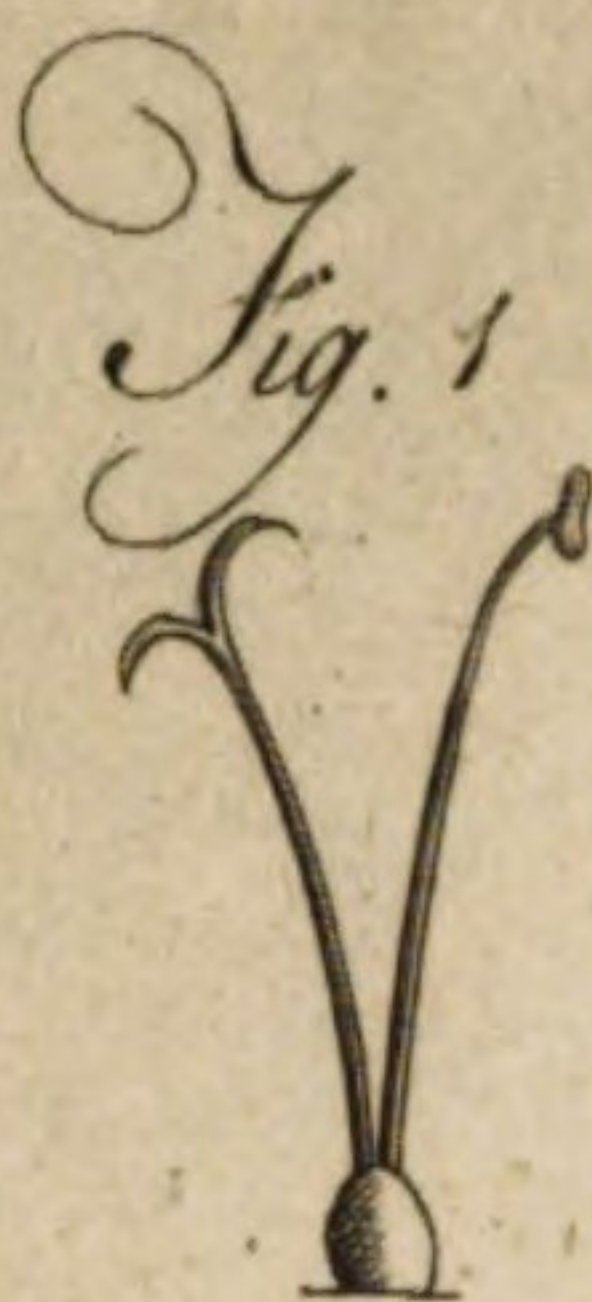
The SEEDS are small, pointed, very numerous, and dispersed through the superficial part of the receptacle.

DIDYNAMIA ANGIGOSPERMIA.

DIGITALIS, OR FOX GLOVE.

The CALYX is a perianthium divided into four deep-



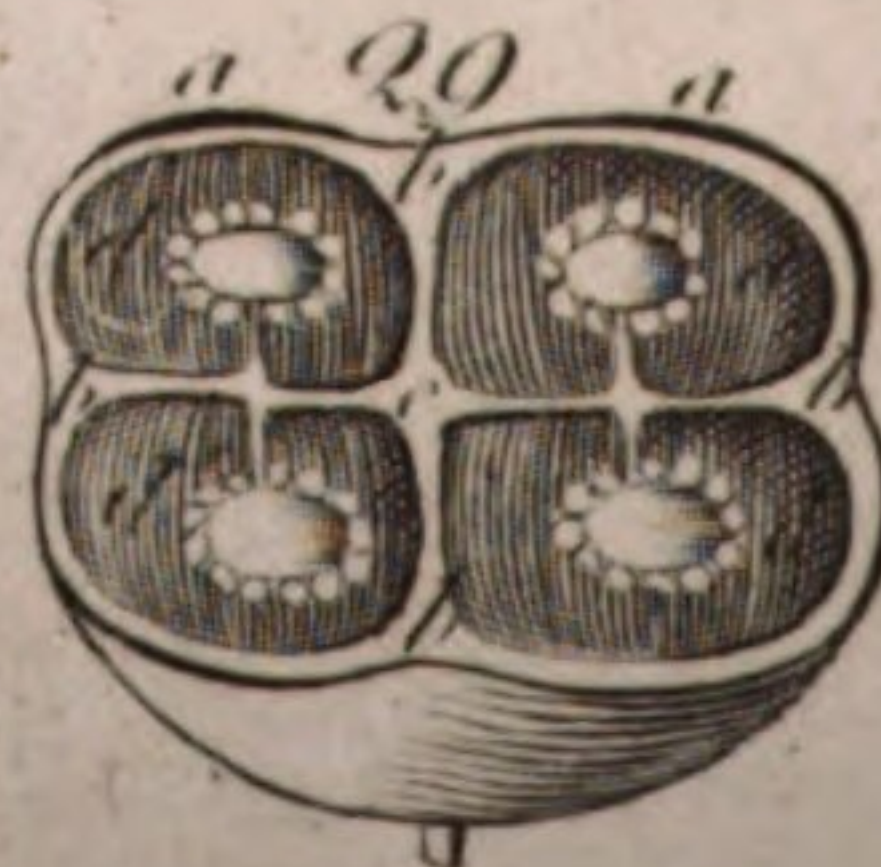
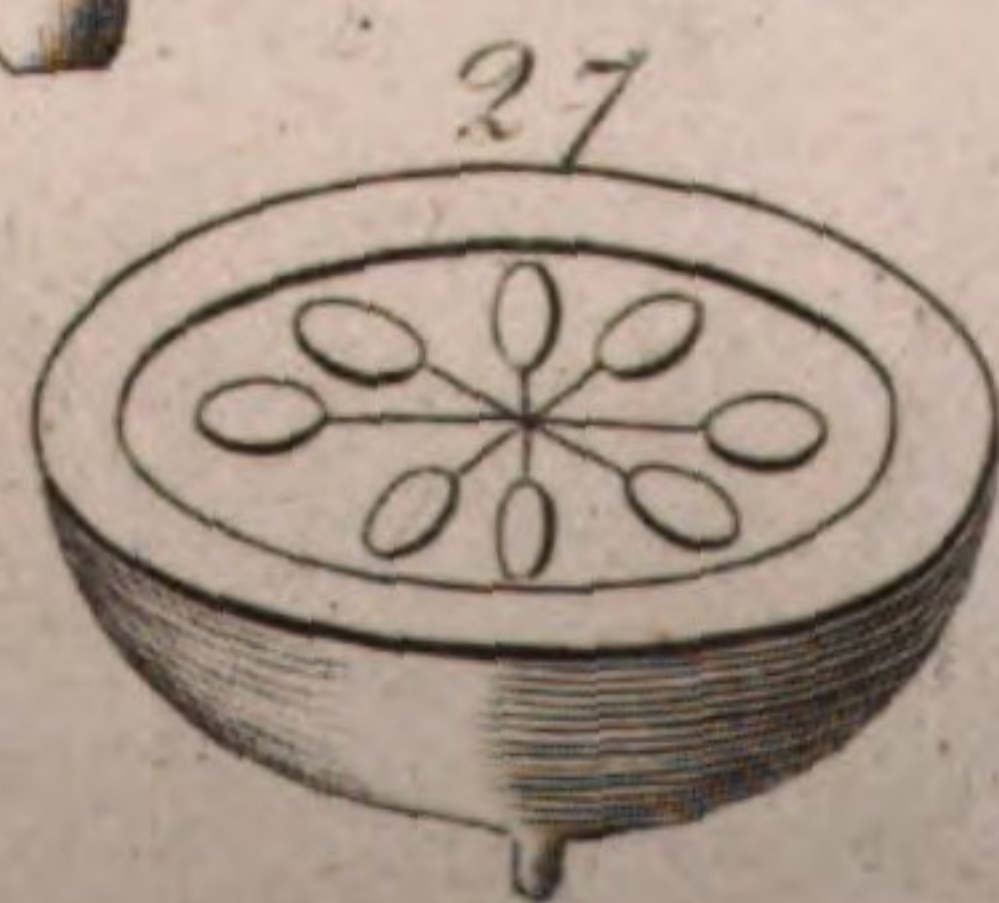
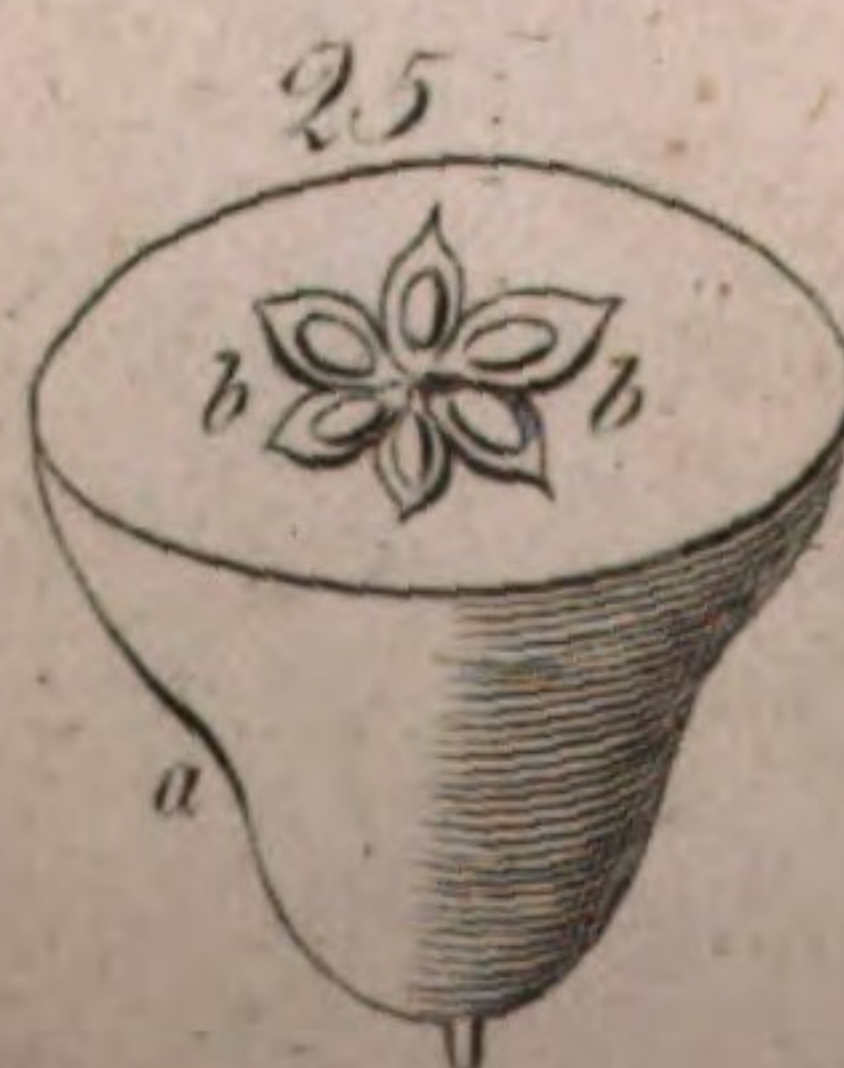
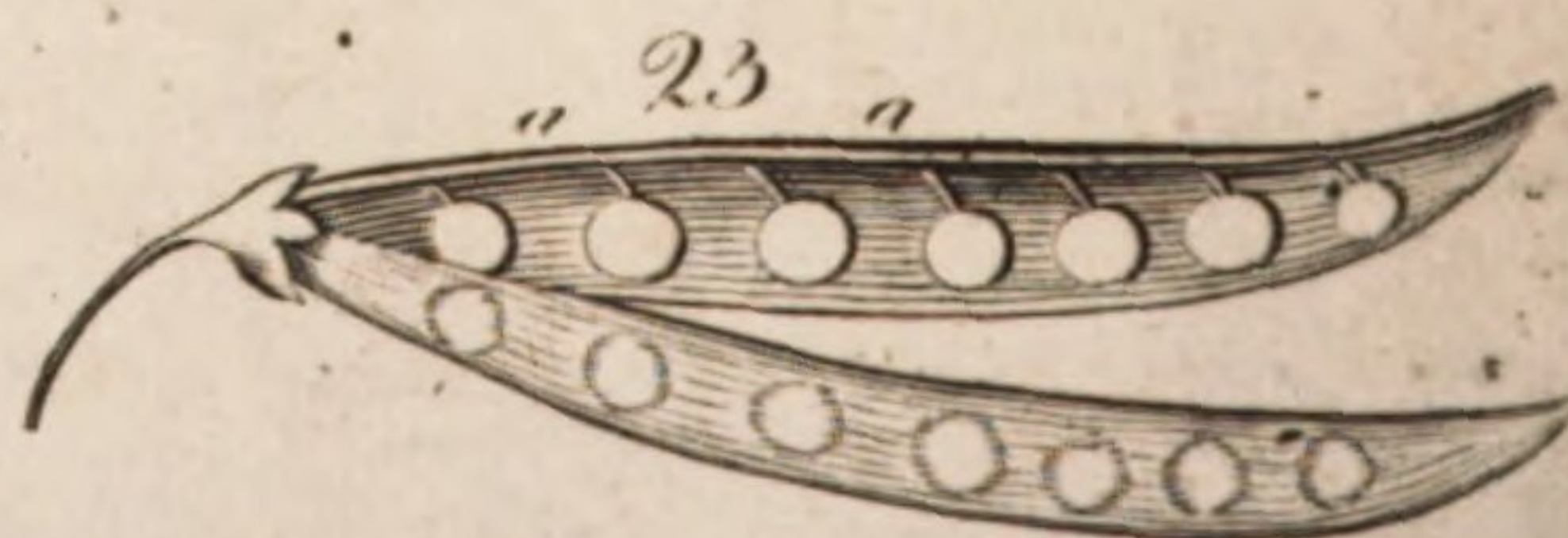
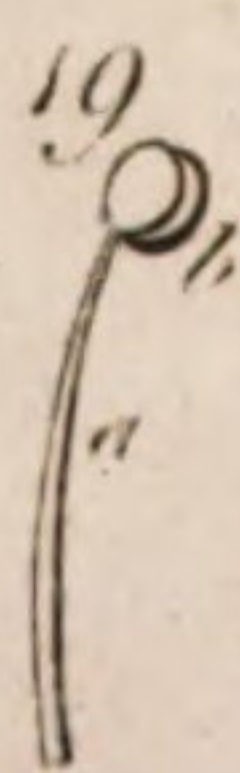


BOTANY.
Parts of the Flower

Plate CIII.



Parts of Fructification



A. B. C.

deep-cut segments, which are roundish, sharp at the top, persistent, and the highest one is narrower than the rest.

The COROLLA consists of one bell-shaped petal; the tubus is large, open, ventricose or bellied at the back-side; the base is cylindrical and narrow: the limbus is small, and divided into four segments; the superior segment is more open and more emarginated than the rest.

The STAMINA are four, subulated (44), inserted into the base of the corolla, and inclined to the same side; two of them are longer than the other two: the antheræ are divided into two parts, and pointed at the top.

The PISTILLUM consists of a germen sharp at the top, a simple style situated like the stamina, and an acute stigma.

The PERICARPIUM has an oval capsule, of the same length with the calyx, sharp at the top, having two cells, and two valves which burst open at both sides.

The SEEDS are many and small.

TETRADYNAMIA SILIQUOSA.

SINAPIS, or MUSTARD.

The calyx is a perianthium consisting of four open or spreading leaves; the leaves are linear (43), concave, furrowed, disposed in the form of a cross, and deciduous.

The COROLLA consists of four cruciform petals: the petals are roundish, plain, open, entire or not emarginated, with erect linear unguis (13) scarcely so long as the calyx.

The NECTARIA (14, &c.), or *glandule nectariferæ*, are four, of an oval figure, one of which is situated on each side betwixt the short stamina and stylus, and likewise one on each side between the long stamina and the calyx.

The STAMINA have six subulated erect filaments, two of which are of the same length with the calyx, and always opposite to each other, and the other four are uniformly longer: the antheræ are erect, and sharp at the top.

The PISTILLUM has a cylindrical germen; the stylus is of the same length with the germen, and the same height with the stamina; the stigma is entire, with a little knob or button.

The PERICARPIUM is an oblong, scabrous, double-celled, two-valved pod, gibbous, and full of little protuberances on the under parts: the dissepimentum (29) is large, compressed, and often twice the length of the valves.

The SEEDS are many and round.

MONODELPHIA POLYANDRIA.

MALVA, or COMMON MALLOW.

The CALYX is a double perianthium: the exterior one consists of three lanceolated, loose, persistent leaves; the interior has but one large, broad, persistent leaf, divided into five segments.

The COROLLA has five plain leaves united at the base, heart-shaped, and premorse, (54).

The STAMINA consist of numerous filaments, united into a cylindrical form below, loose above, and inserted into the corolla: the antheræ are kidney-shaped.

The PISTILLUM has an orbicular germen, a cylin-

dricul short stylus, and many bristly stigmata of an equal length with the stylus.

The PERICARPIUM consists of several distinct capsules joined by an articulation, resembling a depressed globe, and opening from within when ripe: the receptaculum is a kind of column binding the capsules together.

The SEEDS are solitary, and kidney-shaped.

SYNGENESIA POLYGAMIA ÆQUALIS.

LEONTODON, or DANDELION.

The common CALYX is oblong, and imbricated: the interior scales are linear, parallel, equal, and open at the top; the exterior scales are fewer in number, and frequently reflected at the base.

The compound COROLLA is uniform and imbricated.

The small hermaphrodite corollæ are very numerous and equal.

The corolla proper to each floscule consists of one ligulated (*i. e.* plain and expanded outwards), linear, truncated (*i. e.* terminated by a transverse line), and five-toothed petal.

The STAMINA, consist of five very small capillary filaments: the antheræ are connected together, and form a cylindrical tube.

The GERMEN of the pistillum is situated below the proper corolla. The stylus is filiform, and nearly of the same length with the corolla: the stigmata are two, and turned back in a spiral form.

This plant has no pericarpium.

The SEEDS are solitary, oblong, rough, and terminated by a long pappous stipes (31).

The receptacle, or common base of the floscules (9), is naked, and full of small hollow points.

GYNANDRIA PENTANDRIA.

PASSIFLORA, or PASSION-FLOWER.

The CALYX is a perianthium consisting of five plain coloured leaves, similar to those of the corolla.

The COROLLA consists of five plain obtuse semi-lanceolated leaves, of the same magnitude and figure with those of the calyx.

The NECTARIUM is a triple corona, the exterior of which is longest, surrounding the stylus within the petals, and straitened above.

The STAMINA are five, subulated, open and connected to the stylus at the base of the germen: the antheræ are oblong, obtuse, and incumbent.

The PISTILLUM consists of an erect cylindrical stylus, upon the top of which an oval germen is placed: the styli are three, thicker and wider above: the stigmata are roundish knobs.

The PERICARPIUM is a fleshy, suboval, one-celled berry, resting upon the stylus.

The SEEDS are numerous, oval, and each of them inclosed in a small membrane.

MONOECIA TETRANDRIA.

URTICA, or COMMON NETTLE.

The CALYX of the male flowers is a four-leaved perianthium; the leaves are roundish, concave, and obtuse.

The COROLLA has no petals; but there is a small urceolated

ceolated (*i. e.* an inflated skin, gibbous on each side) nectarium in the centre of the flower.

The STAMINA consist of four subulated open filaments, of an equal length with the calyx, and one of them is placed between each leaf of the calyx: the *antheræ* have no cells.

The CALYX of the female flowers is a double-valved, oval, concave, erect, persistent, perianthium.

The COROLLA is wanting.

The PISTILLUM has an oval germen, no stylus, and a downy stigma.

They have no *pericarpium*.

The SEED is single, oval, shining, and a little compressed.

S P E C I E S.

THE genera include a great number of relative species, distinguished by the specific difference of the root, the trunk, the branches, the leaves, &c. (yet all agreeing in the essential generic character); and are called by trivial names (expressive of the difference or some other circumstance) added to the generic name. In order to investigate the species, therefore, it is necessary to understand those differences, and be acquainted with the names by which they are expressed. Several of these have been already incidentally explained; but for a complete enumeration, the reader must have recourse to the nomenclature subjoined to this section. And to illustrate the manner in which those terms are used, we shall here give a few examples; referring, by numbers, to the figures on the plates.

Class II. DIANDRIA.

Order, MONOGYNIA.

Genus, VERONICA, or SPEEDWELL.

Species, *Veronica arvensis*, has solitary flowers; cut, sessile (130), and cordated (46), leaves.

Veronica agrestis, has solitary flowers; cut, cordated (46), and petiolated (129), leaves.

Class XVI. MONODELPHIA.

Order, POLYGYNIA.

Genus, MALVA, or MALLOW,

Species *Malva spicata*, has tomentose (84), crenated (74), and cordated (46), leaves, and oblong hairy spicæ (34).

Malva sylvestris, has an erect (119) herbaceous stalk (148), with acute (74), seven-lobed (50) leaves, and hairy pedunculi and petioli (129).

Class XIX. SYNGENESIA.

Order, POLYGAMIA ÆQUALIS.

Genus, CARDUUS, or THISTLE.

Species, *Carduus benenoides*, or *melancholy thistle*, has lanceolated (42), toothed (66), amplexicaule (132) leaves; with unequal, ciliated (86), small spines (157).

Class XXIV. CRYPTOGAMIA.

Order, FILICES.

Genus, ASPLENIUM, or MAIDENHAIR.

Species, *Asplenium trichomanes*, has a pinnated (104) frons (144); the pinnæ are roundish (38), and crenated (74).

To these examples we shall add a description of a plant, according to the *natural* character, from the *Genera Plantarum*; and according to the *essential* character, with the several species, from the *Systema Vegetabilium*, as translated by the Litchfield Society.

P A P A V E R, P O P P Y.

NATURAL CHARACTER.

- CALYX. A perianthium two-leaved, ovate, end-nick'd; *leaflets* subovate, concave, obtuse, deciduous.
- COROLLA. Petals four, roundish, flat, expanding, large, narrower at the base, less alternately.
- STAMINA. Filaments numerous, capillary, much shorter than the corolla: *antheræ* oblong, compressed, erect, obtuse.
- PISTILLUM. Germ. roundish, large; *stylus* none; *stigma* peltated, flat, radiated.
- PERICARPIUM. A capsule crowned with the large flat stigma, unilocular, semi-multi-unilocular, gaping at the top under the crown with many apertures.
- SEMINA. Seeds, numerous, very small; *receptacles*, longitudinal folds, of equal number with the rays of the stigma adhering to the sides of the pericarpium,

ESSENTIAL CHARACTER.

PAPAVER. Corolla four-petal'd, calyx two leav'd, capsule one-celled, gaping with pores under the permanent stigma. *Poppy*.
* *With hispid capsules.*

- 1 P. HYBRIDUM. Capsules subglobular, brawny, hispid, stem leafy, many flower'd. *mule*.
- 2 P. ARGEMONE. Capsules club'd, hispid, stem leafy, many-flower'd.
- 3 P. ALPINUM. Capsules hispid, scape one-flower'd, naked, hispid, leaves twice feather'd. *alpine*.
- 4 P. NUDICAULE. Capsules hispid, scaped one flower'd, naked, hispid, leave simple, feather-finuus. *naked stem*.
- ** *With smooth capsules.*
- 5 P. RHOEAS. Capsules smooth, globular, stem hairy, many-flower'd, leaves feather-cleft, gash'd.
- 6 P. DUBIUM. Capsules oblong, smooth, stem many-flower'd, with bristles appress'd, leaves feather-cleft, gash'd. *dubious*.
- 7 P. SOMNIFERUM. Calyx and capsules smooth, leaves stem-clasping, gash'd. *somniferous*.
- 8 P. CAMBRICUM. Capsules smooth, oblong, stem many-flower'd, polish'd, leaves feather'd, gash'd.
- 9 P. ORIENTALE. Capsules smooth, stem one-flower'd, rugged, leafy, leaves feather'd, saw'd. *oriental*.

Lastly, we shall subjoin a complete description of a plant reduced to its class, order, genus, and species, with figures of all the parts necessary for that purpose.

RHEUM PALMATUM, or True Rhubarb,
Plate CVII.

The flower of this plant has no CALYX.

The COROLLA, *dd*, consists of one petal, narrower at the base, not perforated, and divided in the margin into six obtuse segments, one less and one larger alternately; the petal is marcescent, *i. e.* decays, but does not fall off till the seeds be ripe.

The STAMINA, *ee*, consist of nine capillary filaments, inserted into the corolla, and about the same length with it. The *antheræ* are didymous (*i. e.* appear to be double), oblong, and obtuse.

The PISTILLUM, *f*, has a short three-sided germen. It can hardly be said to have any styli; but has three reflected plumose stigmata.

The PERICARPIUM is wanting.

Each flower contains but one large, three-sided, acute SEED *g*, with a membranaceous edge.

The number of *Stamina* determines this plant to belong to the ENNEANDRIA Class; and the number of *Stigmata* fixes its Order to be TRIGYNIA. The other parts of the above description clearly demonstrate the genus to be the RHEUM or Rhubarb, and sufficiently distinguish it from the Laurus, Tinus, Cassyta, and Butomus, the only other genera belonging to this class.

The SPECIFIC mark is taken from the leaves, which are PALMATED (58), and sharp and tapering at the points. There are but five species of *Rheum*, none of whose leaves are *palmated*, except the species now described.

EXPLANATION of the PLATES.

PLATE CII. exhibits the 24 CLASSES; fig. 1. representing the first class, or Monandria; fig. 2. the second class, or Diandria; fig. 3. the third class, or Triandria; and so on, according to the enumeration in the table.

PLATE CIII. represents the parts of a plant upon which the investigation of the GENUS depends.

Parts of the FLOWER.—Fig. 1. Spatha. Fig. 2. Spadix. Fig. 3. Gluma, or glume; *b b*, *arista*, or awn. Fig. 4. Umbella and involucre: *a*, Umbella universalis, or universal umbel; *b*, *partialis*, or partial umbel; *c*, *Involucreum universale*, universal involucre; *d*, *partiale*, or partial involucre. Fig. 5. Calyptra: *a*, *capitulum*; *b*, *operculum*; parts of mosses. Fig. 6. Amentum. Fig. 7. Strobilus. Fig. 8. *a*, *Pileus*; *b*, *volva*; *c*, *stipes*: parts of fungi or mushrooms. Fig. 9. *a*, *Receptaculum commune nudum*, the common receptacle, or base of the flower, when the stamina, pistillum, capsule, &c. are taken off. Fig. 10. *Receptaculum commune paleis imbricatum*, or common receptacle imbricated with paleæ or membranaceous lamellæ. Fig. 11. Corolla monopetala—*a*, *tubus*; *b*, *limbus*: *i. e.* *a* the tube *b* the edge or margin, of a monopetalous corolla. Fig. 12. is a flower laid in a proper position for showing its different parts. *a*, *Germen*, which includes the seeds and capsule in which they are inclosed; *b*, *stylus*, a continuation of the germen; *c*, *stigma*, or top of the stylus; *d d d d d*, *filamenta*, or threads; *e e e e e*, *antheræ*; *f f f f f*, *Petala*, or flower-leaves. Fig. 13. *a*, the *ungues* or *claws*, *b*, the *laminae* or plates, of a polypetalous corolla. Fig. 14. *a*, *Nectarium Campanulatum in narcisso*, or bell-shaped nectarium of the narcissus. Fig. 15. *Nectararia cornuta in*

aconito, horned nectararia of the monkhood. Fig. 16. *Horned nectarium* in the calyx of the tropæolus. Fig. 17. *a a a a*, *Nectarium in parnassia*; the nectararia of the parnassia grafs are six in number, each of which have 13 styli, with round buttons on their tops.

Parts of the FRUCTIFICATION.—Fig. 18. *a*, *Perianthium*; *b*, *germen*; *c*, *stylus*; *d*, *stigma*; *e e*, *filamenta*; *f f*, *antheræ debiscentes*, or antheræ shedding the pollen or dust; *g*, *anthera integra*, *i. e.* the appearance of the anthera before it sheds the pollen. Fig. 19. *a* the *filament*, and *b* the *anthera*, separated from the flower. Fig. 20. *a*, one grain of the pollen magnified by a microscope; *b*, *halitus elasticus*, *i. e.* an elastic aura supposed to be necessary for impregnating the seeds. Fig. 21. *a*, *Germen*; *b*, *stylus*; *c c*, *stigma*. Fig. 22. *Folliculus*: The seeds not adhering to the future, are inclosed in a particular receptacle *a*. Fig. 23. *Legumen*, or a double-valved pericarpium, having the seeds fixed only to one of the futures *a a*. Fig. 24. *Siliqua*, or a double-valved pericarpium with the seeds fixed to both futures or margins *a b*. Fig. 25. *Pomum*, or a fleshy pericarpium, containing a capsule in which the seeds are inclosed, as in the apple, &c.; *a*, the *pericarpium*; *b*, the *capsule* or seed case. Fig. 26. *a*, *Drupa*, or pericarpium containing a nut or stone, and having no valve. *b*, the *nucleus*, or stone. Fig. 27. *Bacca*, or berry, a pericarpium containing naked seeds dispersed through the pulpy part. Fig. 28. *Capsula apici debiscentes*, a capsule opening at the top to allow the seeds to fall out. Fig. 29. Four capsules included in a common pericarpium. *a a*, The valves; *b b*, the *dissepimentum*, or partition which separates the different seed-capsules from one another; *c*, *columella*, or central column, by which the capsules are connected. Fig. 30. A capsule cut open longitudinally, to show the receptacle of the seeds. Fig. 31. *Pappus*, or down; *a*, *pilosus*, resembling hair; *b*, *plumosus*, or feathered; *c*, *semen*; *d*, *stipes*.

Pedunculi or *Footstalks* of FLOWERS.—Fig. 32. Plate CIV. *Corymbus*. 33. *Racemus*. 34. *Spica*. 35. *Verticillus*. 36. *Panicula*. fig. 32.—36.

PLATES CIV. CV. CVI. contain delineations relative to the SPECIES of plants.

1. LEAVES as to figure. *A*, *Simple*.—Fig. 37. *Orbiculatum*, of a circular figure. Fig. 38. *Subrotundum*, roundish or nearly circular. Fig. 39. *Ovatum*, ovate. Fig. 40. *Ovale*, *sive Ellipticum*, oval or elliptical. Fig. 41. *Oblongum*, oblong. Fig. 42. *Lanceolatum*, lanceolate. Fig. 43. *Lineare*, linear. Fig. 44. *Subulatum*, subulated, or awl-shaped. Fig. 45. *Reniforme*, reniform, kidney-shaped. Fig. 46. *Cordatum*, cordate, heart-shaped. Fig. 47. *Lunulatum*, lunulated. Fig. 48. *Triangulare*, triangular. Fig. 49. *Sagittatum*, sagittated. Fig. 50. *Cordato-sagittatum*, heart-shaped behind and sharp like the point of an arrow before. Fig. 51. *Hastatum*, halberd-shaped. Fig. 52. *Fissum*, notched. Fig. 53. *Trilobum*, trilobous, or having three (55) lobes. Fig. 54. *Praemorsum*, fore bitten. Fig. 55. *Lobatum*, lobed. Fig. 56. *Quinquangulare*, quinquangular. Fig. 57. *Erosum*, eroded. Fig. 58. *Palmatum*, palmated. Fig. 59. *Pinnatum*, pinnated. Fig. 60. *Laciniatum*, laciniated. Fig. 61. *Sinuatum*, sinuated. Fig. 62. *Dentato-sinuatum*, tooth-sinuous. Fig. 63. *Retrorsum sinuatum*; sinuous backwards. Fig. 64. *Partitum*, partite. Fig. 65. *Repandum*,

pandum, scolloped. Fig. 66. *Dentatum*, dentated. Fig. 67. *Serratum*, serrated or sawed. Fig. 68. *Duplicato-serratum*, doubly serrated. Fig. 69. *Duplicato-crenatum*, doubly crenated. Fig. 70. *Cartilagineum*, cartilaginous. Fig. 71. *Acute-crenatum*, acutely crenated. Fig. 72. *Obtuse-crenatum*, obtusely crenated. Fig. 73. *Plicatum*, plaited. Fig. 74. *Crenatum*, crenated. Fig. 75. *Crispum*, curled. Fig. 76. *Obtusum*, obtuse. Fig. 77. *Acutum*, acute. Fig. 78. *Acuminatum*, acuminate. Fig. 79. *Obtusum cum acumine*, obtuse with a sharp point superadded. Fig. 80. *Emarginatum acute*, acutely emarginated. Fig. 81. *Cuneiforme-emarginatum*, cuneiform and emarginated. Fig. 82. *Retusum*, retuse. Fig. 83. *Pilosum*, hairy. Fig. 84. *Tomentosum*, tomentose or downy. Fig. 85. *Hispidum*, bristly. Fig. 86. *Ciliatum*, ciliated or fringed. Fig. 87. *Rugosum*, rugose or wrinkly. Fig. 88. *Venosum*, venose or veined. Fig. 89. *Nervosum*, nerveose. Fig. 90. *Papillosum*, papillous. Fig. 91. *Linguiforme*, linguiform or tongue-shaped. Fig. 92. *Acinaciforme*, scimitar-shaped. Fig. 93. *Dolabriforme*, hatchet shaped. Fig. 94. *Deltoides*, deltoid. Fig. 95. *Triquetrum*, triquetrous or prismatical. Fig. 96. *Canaliculatum*, channelled. Fig. 97. *Sulcatum*, sulcated. Fig. 98. *Teres*, cylindrical.—B. Compound Leaves. Fig. 99. *Binatum*, binate. Fig. 100. *Ternatum foliolis petiolatis*, ternated with sessile feuilletts or leaflets. Fig. 101. *Ternatum foliolis petiolatis*, ternated with petiolated feuilletts. Fig. 102. *Digitatum*, digitated or fingered. Fig. 103. *Pedatum*, pedated. Fig. 104. *Pinnatum cum impari*, pinnated with an odd feuillet. Fig. 105. *Pinnatum abrupte*, abruptly pinnated. Fig. 106. *Pinnatum alternim*, pinnated alternately. Fig. 107. *Pinnatum interrupte*, abruptly pinnated. Fig. 108. *Pinnatum cirrhosum*, pinnated with a cirrhus. Fig. 109. *Pinnatum conjugatum*, pinnated with only two feuilletts. Fig. 110. *Pinnatum decursivè*, pinnated decursively. Fig. 111. *Pinnatum articulata*, pinnated jointedly. Fig. 112. *Ly-ratum*, lyre-shaped. Fig. 113. *Biternatum*, or *duplicato-ternatum*, biternate, (100), or double ternate, or having three ternated (100) leaves upon one petiole. Fig. 114. *Bipinnatum*, or *duplicato-pinnatum*, bipinnated, or double pinnated, i. e. having the primary pinnae pinnated again a second time. Fig. 115. *Triternatum*, or *triplicato-ternatum*, triple ternated, or consisting of three biternated (113) leaves. Fig. 116. *Tripinnatum sine impari*, triple-pinnated without an odd feuillet, or having the secondary pinnae pinnated again, and these last pinnae not terminated by an odd feuillet. Fig. 117. *Tripinnatum cum impari*, triple-pinnated with an odd feuillet.

2. LEAVES, as to determination.—Fig. 118. *Inflexum*, incurvated. Fig. 119. *Erectum*, erect. Fig. 120. *Patens*, patent or expanding. Fig. 121. *Horizontale*, horizontal. Fig. 122. *Reclinatum*, or *reflexum*, reclined or reflex. Fig. 123. *Revolutum*, revolute. Fig. 124. *Seminale*, seminal leaves, or seed-leaves. Fig. 125. *Caulinum*, cauline or stem-leaf. Fig. 126. *Rameum*, a branch-leaf. Fig. 127. *Florale*, floral; leaf next the flower; also termed a *bractea* or *spangle*. Fig. 128. *Peltatum*, peltated. Fig. 129. *Petiolatum*, petiolated. Fig. 130. *Sessile*, sessile or sitting. Fig. 131. *Decurrens*, decurrent. Fig. 132. *Amplexicaule*, amplexicaule. Fig. 133. *Perfoliatum*, perfoliate. Fig. 134. *Connatum*, connate. Fig. 135. *Vaginans*, sheathing. Fig. 136. *Articulatum*, articulated or jointed. Fig. 137. *Stellatum*, stellated, or verticillated. Fig. 138. *Quaterna*,

quina, *senia*, &c. denote different species of stellated, or verticillated leaves, when there are four, five, six, &c. leaves in one verticillus or whirl. Fig. 139. *Opposita*, opposite. Fig. 140. *Alterna*, alternate. Fig. 141. *Acerosa*, linear and persisting. Fig. 142. *Imbricata*, imbricated, or tyled. Fig. 143. *Fasciculata*, fasciculated or penciled. Fig. 144. *Frons*, a species of stalk or trunk, consisting of branches and leaves, and sometimes the fructification, all united together; peculiar to the Filices or Ferns, and the Palmæ. Fig. 145. *Folium spatulatum*, (Savv.) spatulated, or roundish above, with a long linear base. Fig. 146. *Folium parabolicum*, parabolical; having its longitudinal diameter longer than the transverse, and growing narrower from the base till it terminate somewhat like an oval.

3. CAULES, or STEMS.—Fig. 147. *Culmus squamosus*, a scaly culm or stalk. Fig. 148. *Caulis repens*, a repent or creeping stalk or stem; appropriated to herbaceous plants. Fig. 149. *Scapus*, scape. Fig. 150. *Culmus articulatus*, a jointed culm (147) or stalk. Fig. 151. *Caulis volubilis*, a twining stem. Fig. 152. *Caulis dichotomus*, a dichotomous or two-forked stem. Fig. 153. *Caulis brachiatus*, brachiated.

4. FULCRA or SUPPORTS.—Fig. 154. a, *Cirrhus*, a clasper or tendril; b, *Stipula*, the little scales at the base of the petiole or foot-stalk of the leaf, or at the base of the peduncle or flower-stalk; c, *Glandula concava*, small hollow glands for the secretion of some particular fluid. Fig. 155. a, *Glandula pedicellate*, small pedicellate glands. Fig. 156. a, *Bractea*, a spangle or flower-leaf, differing from the other leaves of the plant. Fig. 157. a, *Spina simplex*, a simple or one-pointed spine. b, *Spina triplex*, a triple or three-pointed spine. Fig. 158. *Aculeus simplex*, a simple or one-pointed prickle. Fig. 159. *Aculeus triplex*, a triple or three-pointed prickle. Fig. 160. *Folia opposita*, opposite leaves; a, the *axilla*, or angle betwixt the leaf and the stalk.

5. ROOTS.—Fig. 161. *Bulbus squamosus*, a scaly bulb. Fig. 162. *Bulbus solidus*, a solid bulb. Fig. 163. *Bulbus tunicatus*, a tunicated or coated bulb. Fig. 164. *Radix tuberosa*, a tuberous root. Fig. 165. *Radix fusiformis*, fusiform or spindle-shaped. Fig. 166. *Radix ramosa*, a branchy root. Fig. 167. *Radix repens*, a repent or creeping root.

ARRANGEMENT and RECAPITULATION of the BOTANICAL TERMS used in the Linnean System.

THE ARRANGEMENT.

I. Names of parts.

GENERAL TERMS applicable to all Parts whatever.

II. Terms expressing the mode of Duration.

III. of Magnitude.

IV. of Substance.

V. of Division.

VI. of Direction.

VII. of Figure; as,

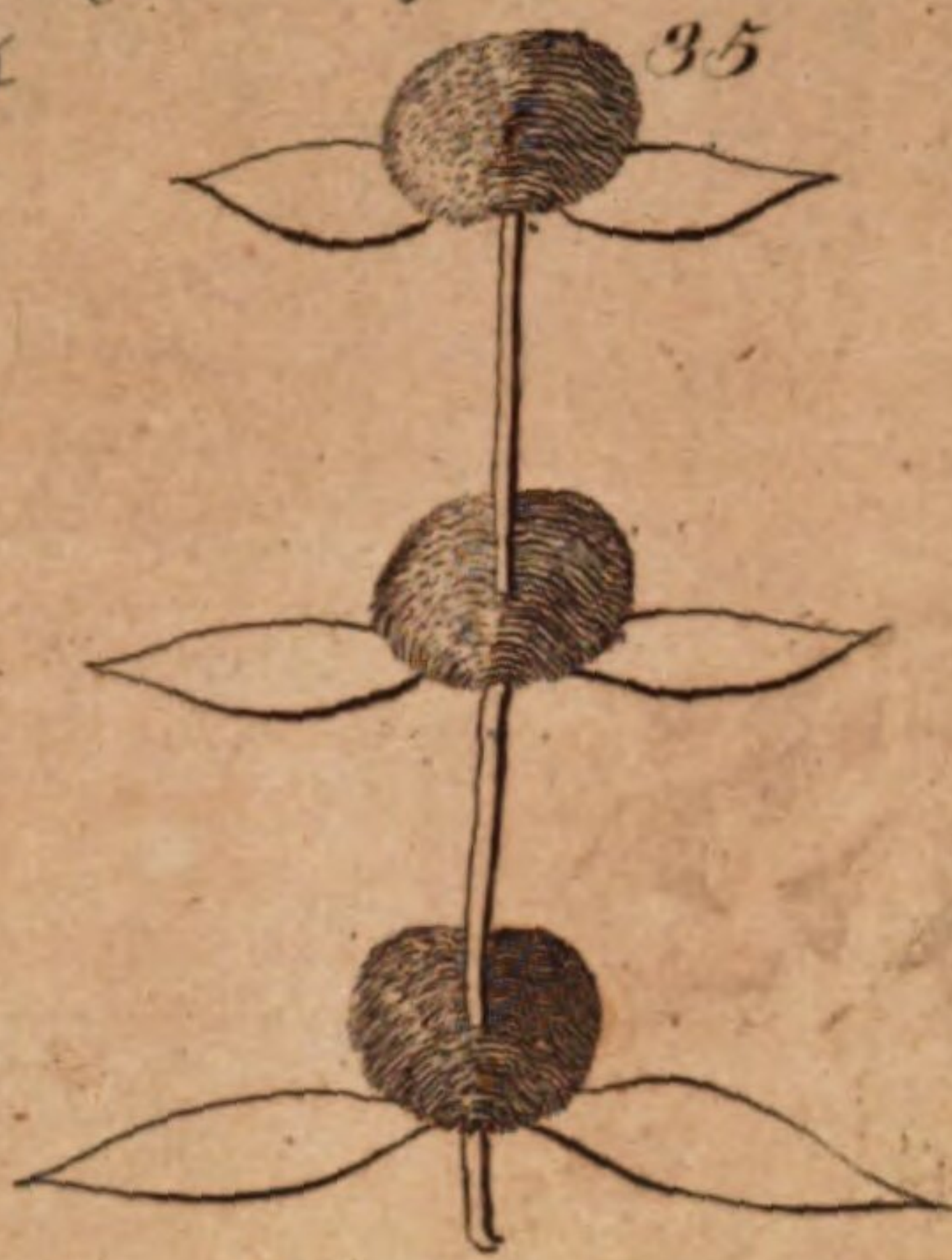
1. of Surfaces.

2. of Solids.

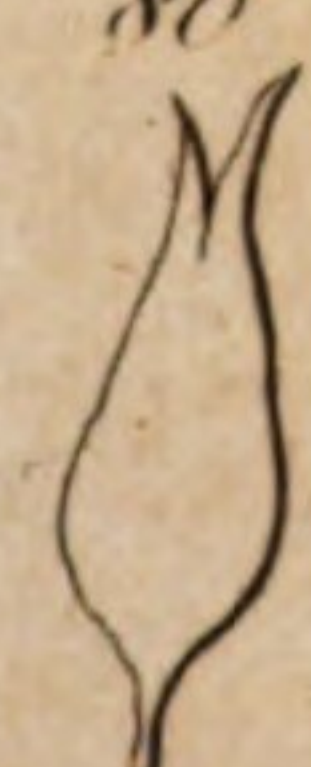
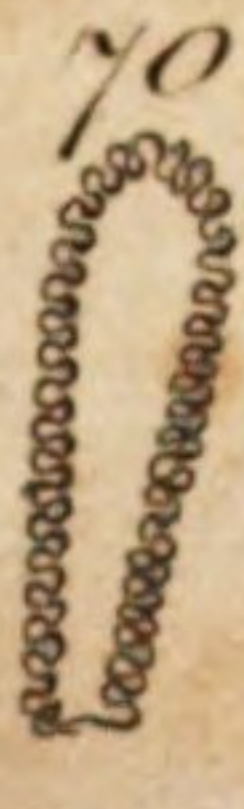
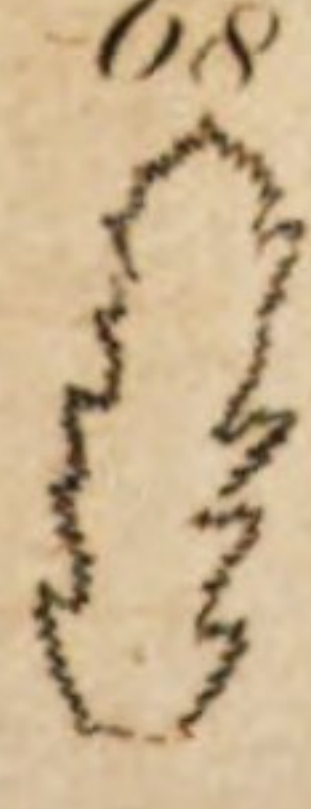
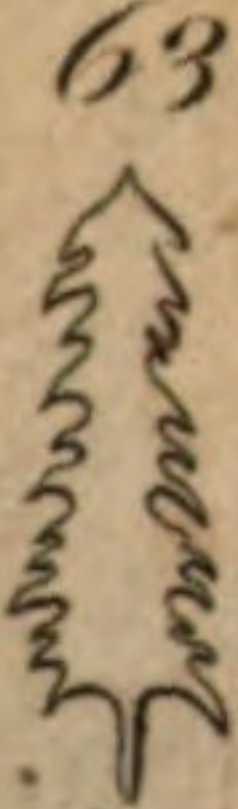
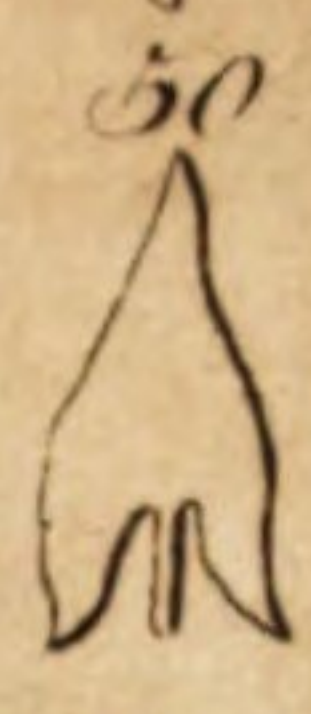
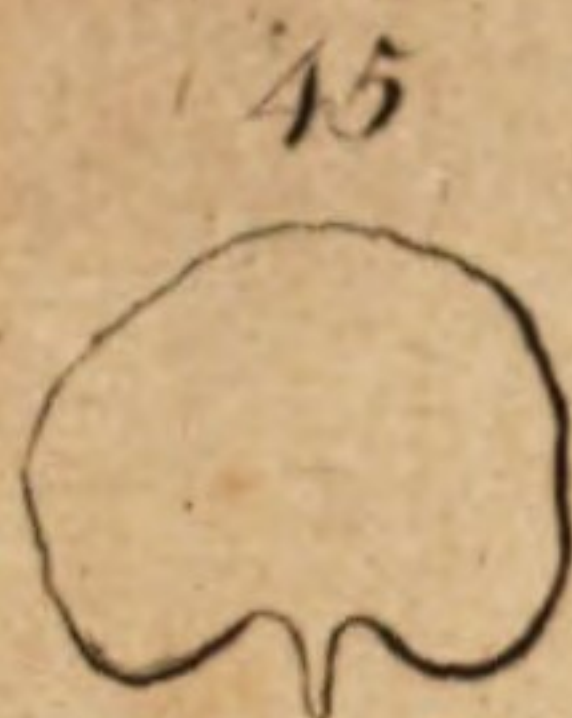
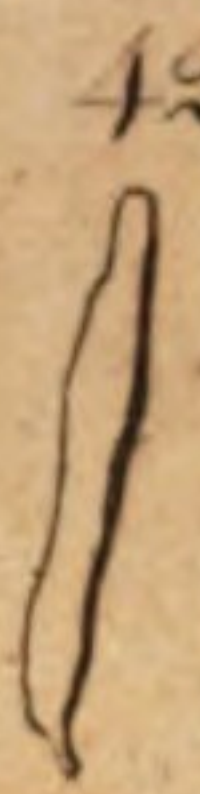
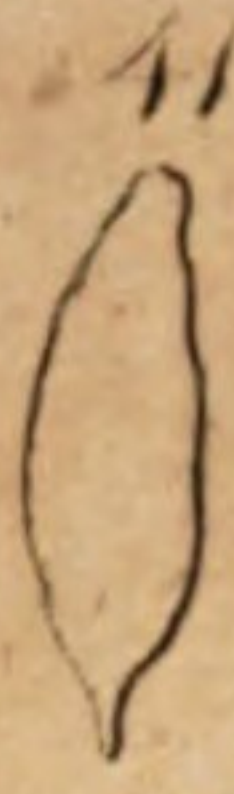
3. of Similitude.

VIII.

Pedunculi or Footstalks of Flowers.

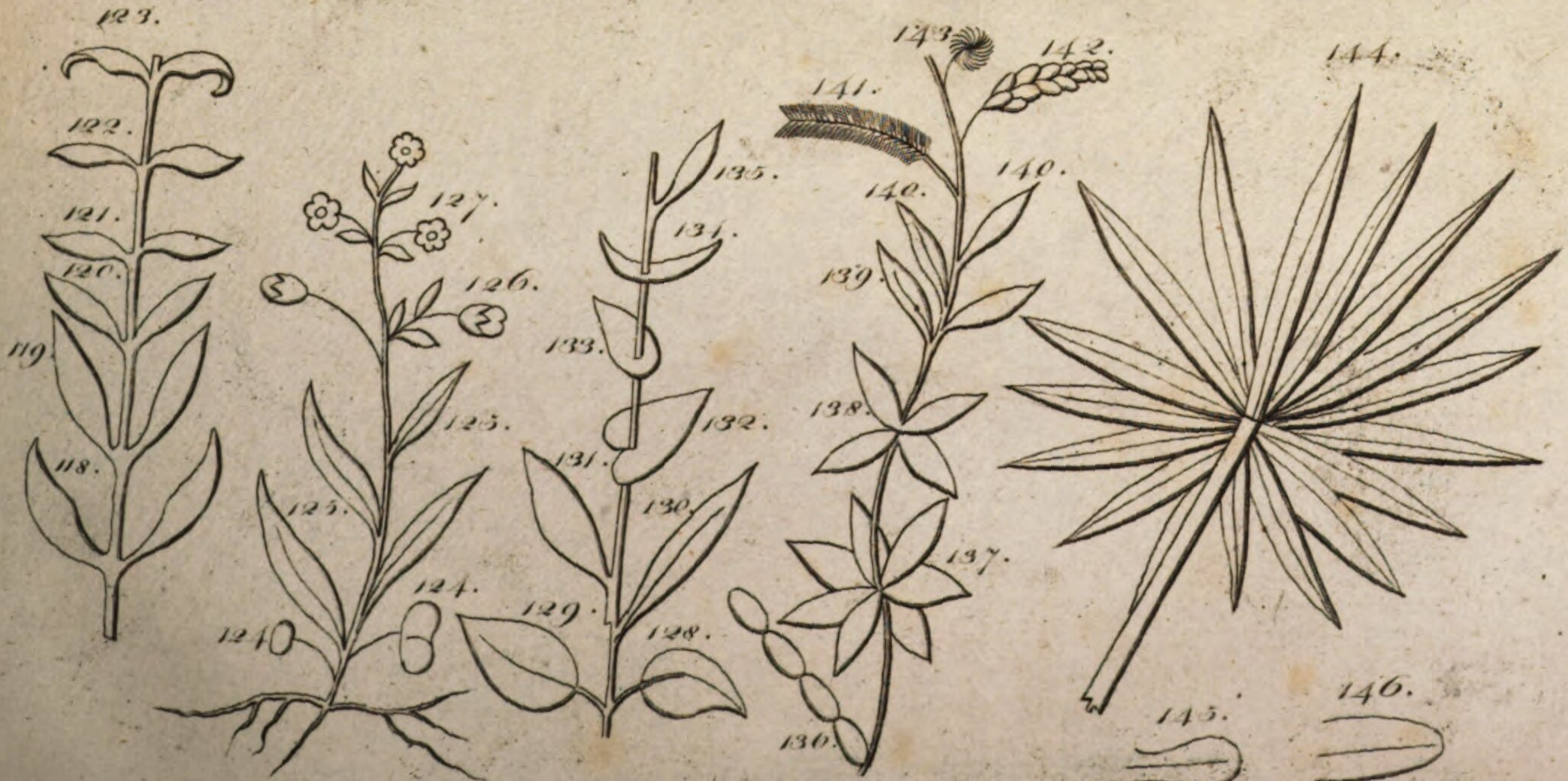


Leaves as to figure Δ, Simple.





Leaves, as to determination.



A. Bell Pin. H. & C. sculptor fecit.





Rheum Palmatum.
or
True Rhubarb.

VIII. Terms expressing the mode of Expansion.

- IX. of Place.
 X. of Situation.
 XI. of Surface.
 XII. of the Margin.
 XIII. of the Point or Top.

SPECIAL TERMS, or such as agree or are applicable only to certain Parts.

- XIV. Terms applicable to the Root.
 XV. the Trunk.
 XVI. the Petiole.
 XVII. the Leaf; as being either
 1. Simple; or
 2. Compound, Decom-
 pound, or Supra-
 decompound.
 XVIII. the Down, Hair, &c.
 XIX. the Armour.
 XX. the Floral-leaves.
 XXI. the Peduncle.

Under this are included the Inflorescence and its different modes.

XXII. Terms applicable to the Fructification.

Under this are included,

1. The calyx or cup.
 2. The corolla, or coloured part of the flower.
 3. The stamina, or chives.
 4. The pistillum.
 5. The pericarpium, or seed-case.
 6. The seed.
 7. The receptacle.

XXIII. Terms applicable to the Vernation.

XXIV. Additional Terms.

N^o I. *The PARTS of a PLANT are,*

- 1 The root, the organ that nourishes the plant.
 2 The trunk or stalk, the organ that multiplies it.
 3 The branches, or divisions and subdivisions of the stalk.
 4 The petioles, or stalks that support the leaves (6).
 5 The peduncles, or stalks that support the fructification (285).
 6 The leaves, which are the organs of motion to the plant.

The FRUCTIFICATION, consisting of the Flower and the Fruit.

The Parts of a Flower are,

- 7 The cup, or outer rind of the plant, continued to and present in the fructification.
 8 The corolla, or inner rind of the plant, continued to and present in the coloured part of the flower, fig. 35.
 9 The stamina, or chives, the organs destined for the preparation of the pollen (332) or flower-dust, fig. 36, d d d d, e e e e c.
 10 The pistil, or organ adhering to the fruit, for the reception of the pollen, f. 36, a b c.

The Parts of the Fruit are,

- 11 The pericarpium, or seed-case; the bowel or organ

containing the seeds (12), which, when ripe, it lets go, f. 49, a.

- 12 The seed, or rudiment of a new plant, supposed to be vivified by the irrigation, or sprinkling of the pollen or flower-dust, f. 55, c.
 13 The receptacle, or base with which the parts of the fructification are connected, f. 33, a. 34.
 14 The stipula, or small scaly leaf that usually stands at the base of the petioles when they are rising.
 15 A cirrus, tendril, or spiral thread by which a plant is tied to any neighbouring body, f. 178.
 16 A bractea, spangle, or floral leaf, differing in its appearance from the other leaves of the plant, f. 151, 180.
 17 The pubes, the down or hairyness of any sort on plants.
 18 Arma, the armour or sharp points that defend a plant from being hurt by animals.
 19 A bulb, the winter habitation of a plant, consisting of the remains of its former leaves.
 20 A gem or bud, consisting of the rudiments of the plant's future leaves, f. 36, a; f. 42, b; 45, a.

GENERAL TERMS.

N^o II. *The DURATION of a Plant is either,*

- 21 Annual, or dying within one year.
 22 Biennial, or flowering the second year, and then dying.
 23 Perennial, or flourishing for many years.
 24 Caducous, or falling down and dying before the end of one season.
 25 Deciduous, dying at the end of one season.
 26 Persisting, not dying after one season.
 27 Sempervirent, evergreen, or remaining fresh and green through all the seasons of the year.

N^o III. MAGNITUDE.

"I very seldom admit," says Linnæus, "any other than the proportional measure between the different parts of plants, where this or that part is longer or shorter, broader or narrower, than another."
Phil. Bot. p. 262.

N^o IV. *SUBSTANCE is either,*

- 28 Solid, filled internally with hard matter.
 29 Inane, filled only with spongy matter.
 30 Pulpous, filled with tenacious or glutinous matter.
 31 Carnous, or fleshy, filled with a hardish pulp.
 32 Cartilaginous, consisting of gristly matter.
 33 Membranaceous, consisting of dry and skinny matter.
 34 Fistulous, tubulated or hollow within.

N^o V. *DIVISION is either,*

- 35 Fissured, or divided by linear (70) notches, with straight (42) margins, f. 76.
 36 Bifid, trifid, &c. to quinquefid, according to the number of fissures.
 37 Partite, divided almost to the base.
 38 Bipartite, tripartite, &c. to quinquepartite, according to the number of divisions.
 39 Lobate, or lobed, divided down to the middle into parts standing asunder, f. 77, 79.

- 40 Sinuated, admitting of wide sinuses or notches on the sides, f. 85, 86, 87.
 41 Dichotomous, trichotomous, &c. divided successively into two, three, or more parts, f. 176.

N^o VI. DIRECTION is either,

- 42 Right, or straight, free of bendings.
 43 Erect, rising nearly to a perpendicular, f. 143.
 44 Oblique, departing from a perpendicular, or horizontal line.
 45 Ascending, or turned archwise upward.
 46 Declining, or declined, turned archwise downward.
 47 Incurvated, turned archwise inward, f. 142.
 48 Nutant, nodding, having the point turned outward.
 49 Reflex, having any part turned backward.
 50 Revolute (377) rolled back into a spiral line.
 51 Procumbent, weak and leaning on the ground.
 52 Flexuose, bent hither and thither.

The following terms respect chiefly the direction of branches (3).

- 53 Patent, expresses the direction of an acute angle, or an angle above 45 degrees, f. 144.
 54 Diverging, parting at a right angle.
 55 Divaricated, expresses the direction of an obtuse angle.
 56 Dependent, looking straight to the ground.
 57 Distich, or distichated [flowers, leaves, or branches] turning to the two sides, though inserted all round.
 58 Sequent, turning all to one side.
 59 Apprest, approaching so as to be almost parallel to the stalk or trunk.
 60 Coarctate, almost incumbent towards the top.
 61 Diffuse, having small patent (53) branches.

N^o VII. FIGURE is that, either of Surfaces, or Solids, or Similitudes.

1. The figure of Surfaces is either,

- 62 Orbicular, of a circular form, f. 61.
 63 Subrotund, almost circular; and subglobose, almost spherical, f. 62.
 64 Ovate, having its longitudinal diameter longer than the transverse, with a base terminated by a segment of a circle, and the top narrower, f. 63.
 65 Parabolical, resembling a parabola, f. 170.
 66 Elliptical, resembling an ellipse or oval, f. 64.
 67 Cuneiform, wedge-shaped, growing by degrees narrower toward the base.
 68 Oblong, having the longitudinal diameter any number of times longer than the transverse diameter, f. 65.
 69 Lanceolate, oblong (68), and attenuated (75) on either end, f. 66.
 70 Linear, every where of equal breadth, f. 67.
 71 Triangular, quadrangular, &c. according to the number of angles, f. 72, 80.
 72 Rhombeous, or rhomboidal, of the shape of a rhombus.
 73 Trapeziform; of the shape of a trapezium.

2. The figure of Solids is either,

- 74 Filiform, every where of equal thickness.
 75 Attenuated, gradually losing its thickness towards the point.

- 76 Subulated, awl-shaped; linear, but attenuated towards the point.
 77 Clavated, club-shaped, growing thicker towards the point or top.
 78 Turbinate, top-shaped like an inverted cone.
 79 Globose, globular, like a sphere.
 80 Conical, resembling a cone.
 81 Teres, round, like a cylinder, f. 132.
 82 Semiteres, half round, semicylindrical.
 83 Anceps, two-edged, having the two opposite angles acute.
 84 Trigonous, tetragonous, &c. having three, four, &c. prominent longitudinal angles.
 85 Triquetrous, having three exactly plain sides (109), f. 119.
 86 Gibbous, or gibbose, having both upper and under surface convex, by reason of a more copious pulp (30) intervening.
 87 Compressed pulpos (30), having the edges flatter than the disc or middle.
 88 Depressed pulpos, having the disc flatter than the edges.

- 89 Lingulated, tongue-shaped; linear (70), carnos (31), convex (112), below, f. 115.
 90 Ensiform, sword-shaped, ancipitous, (83), gradually attenuated, or tapering from the base to the top.
 91 Acinaciform, sabre-shaped, compressed (87), carnos, have the one edge convex and thin, and the other straighter and thicker, f. 116.
 92 Dolabriform, hatchet-shaped, compressed, subrotund (63), gibbous on the outside (86), with the edge sharp, and roundish below, f. 117.

The tubulated figures that are mostly applied to the corolla, are,

- 93 Infundibuliform, funnel-shaped, an inverted cone placed upon a tube.
 94 Campanulated, bell-shaped, ventricose, (107), without any tube.
 95 Inflated, hollow, and as it were blown up like a bladder.
 96 Rotated, wheel-shaped, plain, and not placed on a tube.

3. The figure of Similitudes is either,

- 97 Cordate, heart-shaped, subovate, having a notch cut out of the base, without any posterior angles, f. 70.
 98 Reniform, kidney-shaped, subrotund (63), having a notch cut out of the base, without posterior angles, f. 69.
 99 Lunular, crescent-shaped, subrotund, having the base notched, with acute posterior angles, f. 71.
 100 Sagittated, arrow-shaped, triangular (71.), having acute posterior angles separated by a notch, f. 73, 74.
 101 Hastated, halberd shaped, sagittated, (100), having the posterior angles divided by a blunt notch, and prominent toward the sides, f. 75.
 102 Lyrated, lyre-shaped, divided across into laciniae, or segments of no determinate form, whereof the under ones are lesser and more remote from one another than the upper ones, f. 136.
 103 Renunciated, pinnatifid, (i. e. divided across into horizontal oblong segments), in such sort that the segments are convex on the fore-side and transverse behind, e. g. the dandelion.

- 104 Panduriform, pandour-shaped, oblong, and contracted or narrowed below.
 105 Spathulated, subrotund or roundish, with a linear and narrower base, f. 169.
 106 Palmated, divided past the middle into lobes nearly equal, f. 82.
 107 Ventricose, gibbous or swelling out on the sides.
 108 Deltoid, rhomboidal (72), consisting of four angles, of which the lateral ones are less distant from the base than the other two; as the leaves of the black poplar. See also the figure of the ancient *delta* of the Greeks, f. 118.

N^o VIII. EXPANSION is either,

- 109 Plain, having an equal surface.
 110 Canaliculated, hollowed above with a deep longitudinal furrow, f. 120.
 111 Concave, by the margin being less in proportion than the disk, and the disk of course depressed or pushed downwards.
 112 Convex, by the margin being less in proportion than the disk, so that the disk is elevated or pushed upwards.
 113 Cucullated, cowl-shaped, having the edges folded or curling inwards at the base, and spreading at the top like a cowl.
 114 Undated, waved, having the disk alternately bending up and down in obtuse plaits.
 115 Crisped, curled, by having the margin so luxuriant that the disk becomes longer than its rachis (283) or quill.

N^o IX. PLACE.

1. A Leaf is either,

- 116 Radical, growing out of the root.
 117 Cauline, growing on the caulis (197) or stalk, f. 149.
 118 Ramous, growing on a branch, f. 140.
 119 Axillary, placed under the base of a branch.
 120 Floral, next the flower. See Def. 16. f. 151.

2. A *stipula*, or *scale*, is either,

- 121 Lateral, inserted into the side of a petiole.
 122 Extrafoliaceous, placed below a leaf.
 123 Intrafoliaceous, placed above a leaf.
 124 Oppositifolious, placed on the side of the stalk opposite to a leaf.

3. A *Cirrhus*, or *tendril*, is either,

- 125 Petiolar, growing out of a petiole or leaf-stalk.
 126 Peduncular, growing out of a peduncle or flower-stalk, &c. &c.

N^o X. The SITUATION of the Parts of a Plant is either,

- 127 Opposite, when the leaves, &c. are placed in decussated (129) or cross pairs, f. 163, 184.
 128 Alternate, growing all round a stalk or branch one after another gradually, f. 164.
 129 Decussated, placed opposite in such a manner, that if one look down from the top of the plant, the leaves, &c. represent four distinct rows.
 130 Verticillated, whirled; leaves, flowers, &c. surrounding the stalk or trunk at the joints in great number, like a whirl, f. 59.

- 131 Bifarious, leaves, &c. growing only on the opposite sides of a stalk or branch.
 132 Sparse, placed without any certain order.
 133 Fasciculated, pencilled, growing in numbers out of the same point like a pencil, f. 167.
 134 Confert, close-ranged, leaves, &c. almost covering the whole surface.
 135 Distant, parts remote from one another.
 136 Terminal, placed at the top.

N^o XI. A SURFACE is either,

- 137 Naked, destitute of setæ (245) or bristles, and pili (240) or hairs.
 138 Levigated, smooth, of an equal plainness. The same with plain (109).
 139 Glabrous, of a slippery nature.
 140 Nitid, slippery and shining.
 141 Lucid, as if it were illuminated.
 142 Coloured, of a colour different from green (when that is the natural colour).
 143 Lineated, lined, the nerves being depressed.
 144 Striated, gently furrowed in parallel lines.
 145 Sulcated, furrowed in deep lines, f. 121.
 a. Alveolated, honey-combed, a receptacle deeply pitted so as to resemble a honey-comb.
 b. Hispid, any surface planted with stiff short hairs, f. 109.
 c. Rimose, full of rents or chinks.

[The following terms, to 156, belong chiefly to Leaves.]

- 146 Nervous, having unconnected small vessels, resembling nerves, running from the base to the top, f. 113.
 147 Trinerved, having three small nerves meeting at the base.
 148 Triplinerved, having three nerves meeting above the base.
 149 Trinervated, having three nerves meeting below the base.
 150 *Enervis*, nerveless, the opposite to nervous.
 151 Venous, having veins or small vessels divided variously, without any regular order.
 152 *Avenis*, veinless, the opposite to venous.
 153 Rugose, wrinkled, full of wrinkles, f. 111.
 154 Bullated, having the surface, from being rugose, raised up in the form of bubbles, by the veins being contracted, the other side by that means becoming concave.
 155 Lacunous, pitted, by the disk being depressed between the interspersed veins.
 156 Punctated, besprinkled with hollow points.
 157 Papillous, covered with carnosous or fleshy points, f. 114.
 158 Papulous, covered with vesicular or bladder-like points.
 159 Viscid, besmeared with a glewy moisture.
 160 Tomentose, covered with fine down interwoven together, hardly to be discerned, f. 104.
 161 Villous, covered with soft hairs. See *Villi* (241).
 162 Sericeous, silky, covered with very fine hairs laid close down.
 163 Lanated, woolly, covered as it were with a cobweb (or spontaneously curled hairs). See *Lana* (242).
 164 Pilose hairy, covered with long distinct hairs. See *Pili* (240), and f. 107.

- 165 Bearded, covered with parallel hairs. See *Barba* (243.)
 166 Setaceous, bristly, set or covered with bristles. See *Seta* (245).
 167 Scabrous, having hard prominent points causing a roughness to the touch.
 168 Aculeated, armed with prickles fixed only to the bark. See *Aculei* (253).
 169 Strigose, having stiff lanceolated (69) prickles. See *Striga* (244).
 170 Paleaceous, chaffy, covered with dry scales resembling chaff. See *Palea* (246).
 171 Muricated, besprinkled with subulated points.
 172 Spinous, thorny, beset with spines, or prickles rising out of the wood of the plane.
 173 Burning, beset with stimulating and inflaming points, as the nettle, &c.

No XII. A MARGIN is either,

- 174 Entire, linear without the least dent or notch.
 175 Crenated, having notches without respect to the extremity, f. 93, 95, 96, 98.
 176 Serrated, saw-toothed, all the notches and teeth looking towards the extremity, f. 91, 92.
 177 Ciliated, having parallel bristles set in a row lengthwise, like eye-lashes, f. 110.
 178 Dentated, toothed, with the points patent and asunder, f. 90.
 179 Repand, having a plain serpentine form, f. 89.

No XIII. An APEX or Point is either,

- 180 Obtuse, terminated within the segment of a circle, f. 96, 100, 103.
 181 Emarginated, terminated by a notch, f. 104, 105.
 182 Retuse, terminated by a round bosom, f. 106.
 183 Truncated, terminated by a transverse line.
 184 Acute, terminated by an acute angle, f. 101.
 185 Acuminated, terminated by a subulated or awl-shaped point, f. 102.
 186 Cuspidated, terminated by a bristle or prickle.

SPECIAL TERMS.

No XIV. A ROOT is either,

- 187 Fibrous, consisting wholly of small fibres.
 188 Bulbous, furnished with a bulb (19).
 189 1. Solid (28).
 190 2. Scaly, with the scales imbricated (390).
 191 3. Tunicated, having coats above coats.
 192 Tuberous, consisting of fleshy parts connected by threads to the base.
 193 Fascicular, consisting of fleshy parts connected to the base without the intervention of threads, f. 167.
 194 Granulated, composed of small fleshy particles.
 195 Fusiform, spindle-shaped, single and tapering, f. 189.
 196 Repent, running out a great way, and budding here and there.

No XV. A TRUNK is,

- 197 1. A stem or stalk (f. 172—177; a trunk supporting both the fructification and the leaves.
 198 2. A culm, proper to grasses, f. 171, 174.

- 199 3. A scapus or shaft; a trunk supporting the fructification, but not the leaves, f. 173.
 200 4. A stipes or stock; a trunk changing into leaves, f. 32 c; 55 d.
 201 Scandent, climbing, but needing the support of other bodies.
 202 Voluble, twining, ascending (45) in a spiral line by the assistance of other bodies.
 203 Repent, creeping, lying on the ground and sending out roots here and there. See 196, f. 191.
 204 Sarmentose, full of twigs, filiform, with rooting joints.
 205 Stoloniferous, putting forth young shoots at the root, or tillering.
 206 *Simplicissimus*, very single, having scarcely any branches.
 207 *Simplex*, single, extended in a continued series towards the top.
 208 Entire, very single, with the branches gathering inwards.
 209 Proliferous, putting forth branches only from the middle of the top.
 210 Subramose, having only a few lateral branches.
 211 Ramose, having many lateral branches, f. 190.
 212 *Ramosissimus*, very ramose, loaded with numerous branches, without any determinate order.
 213 Virgated, having small weak pliant branches of unequal length.
 214 Panicked, having branches variously subdivided.

No XVI. A PETIOLE is either filiform, or,

- 215 Alated, winged, dilated on the sides.
 216 Spinescent, hard and pricking.

No XVII. A LEAF is either simple or compound.

A. A simple Leaf, f. 168, may be,

- 217 Submersed, hid under the surface of water.
 218 Natant, swimming, lying on the surface of the water.
 219 Acerous, chaff-like, linear and persistent (26), f. 141.

The Insertion of Leaves.

- 220 Petiolated, having a petiole inserted at its base, f. 153.
 221 Peltated, or targetted, having the petiole in the disk of the leaf, f. 152.
 222 Adnate, connected with the branches at the base on the upper side.
 223 Connate, having the opposite pairs united at the base on each side, f. 158.
 224 Coadunate, having more than two united.
 225 Decurrent, having the base of the leaf running along the stalk downwards, f. 155.
 226 Amplexicaule, having the base surrounding or embracing the stalk, f. 156.
 227 Perfoliated, having the base surrounding the stalk straight across, without any opening before, f. 157.
 228 Vaginating, or sheathing, having the base forming a tube that covers the stalk, f. 159.

- B. 1. A Leaf is called Compound, when the same Petiole produces more Leaves than one. It is
 229 Articulated, jointed, when one leaf grows out of the top of another, f. 160.

- 230 Digitated, when a simple petiole connects leaflets or small leaves at the top. Binate, ternate, &c. are modifications of this according to the number of leaflets thus connected, f. 126.
- 231 Pedated, when a bifid or forked petiole connects several leaflets only by the interior side, f. 127.
- 232 Pinnated, or feathered, when a simple petiole connects any number of leaflets to its sides. Bijugous (double-paired), quadrijugous (four-paired,) &c. when only four, eight, &c. &c. leaflets are thus connected, f. 83. 128—135.
- Pinnated with an odd one, when terminated by a single or odd leaflet.
- abruptly, when terminated neither by a tendril nor by a leaflet.
- cirrhous, when terminated by a tendril (15).
- with opposite (127) leaflets.
- with alternate (128) leaflets.
- with interrupted leaflets, when the leaflets are alternately greater and smaller.
- with decursive leaflets, or leaflets running down the petioles.
2. *A Decomound Leaf is either,*
- 233 Bigeminous, q. double-twin, leaves, when the petiole is dichotomous, or successively divided into two, and every top carries a pair of leaflets.
- 234 Biternated, doubly ternated (230), f. 137.
- 235 Bipinnated, doubly pinnated (232), f. 138.
3. *A Supradecomound Leaf is either,*
- 236 Tergeminous, when the petiole being twice dichotomous, or divided into two, bears a pair of leaflets.
- 237 Triternated, thrice ternated, f. 139.
- 238 Tripinnated, thrice pinnated, f. 140, 141.
- Stipula, or Scale.*
- Cirrhus, or Tendril.*
- N^o XVIII. PUBES, the hair, wool, &c. of plants, is either,
- 239 *Tomentum*, a flock, fine interwoven hairs (*villi*), scarcely visible. See 160, 241, and f. 104.
- 240 *Pili* (164), excretory ducts of a plant resembling setæ or bristles (166).
- 241 *Villi* (161), soft hairs.
- 242 *Lana* (163), curled thick hairs.
- 243 *Barba*, a beard, parallel hairs.
- 244 *Strigæ*, comb-teeth, stiff rigid plain hairs.
- 245 *Setæ*, bristles, stiff round hairs.
- 246 *Palea* (170), a membranaceous scale (33).
- 247 *Hamus*, hook, an acuminate (185) crooked point.
- 248 *Glochis*, a point or prickle with many teeth turned backwards.
- 249 Glandule, a papilla, or small gland secreting moisture, f. 178. b. 179, a.
- 250 Utricle, a small vessel full of secreted moisture.
- 251 Viscosity, expresses the quality of tenacious moisture.
- 252 Glutinosity, expresses the quality of slippery humour.
- N^o XIX. ARMA, the arms of plants, are either,
- 253 *Aculei*, prickles, pricking points affixed only to the bark.
- 254 *Furcæ*, forks, prickles (253) divided or forked.
- 255 *Spinæ*, (172), thorns, points or prickles put forth from the wood of the plant, f. 181.
- 256 *Stimuli* (273), points producing inflammatory punctures, whereby the parts become itching.
- N^o XX. *A BRACTEA, or floral leaf.*
- 257 *Coma*, the bractæ or spangles on the top of the stalk of some plants, remarkable in size compared to the other leaves.
- N^o XXI. *A PEDUNCLE is either,*
- 258 Common, to more flowers than one.
- 259 Partial, bearing any number of flowers of the common peduncle.
- 260 A pedicle, proper to flowers in a common peduncle.
- 261 Cernuous, stooping, having the top looking to the ground.
- 262 Retrofract, broken backward, reduced to a depending state as if by force.
- 263 Multiflorous, producing many flowers.
- 264 INFLORESCENCE is the mode in which flowers are connected to the peduncle of a plant; and this is either,
- 265 1. *Verticillus*, a whirl, when a number of flowers surround the plant in a ring.
- 266 2. *Capitulum*, a knot, when a number of flowers are collected together in form of a globe. It signifies also the upper parts of the fructification of mosses, f. 29, a.
- 267 3. *Fasciculus*, a bunch, when erect parallel flowers of equal height are collected together, (392).
- 268 4. *Spica*, a spike, when sessile alternate flowers are placed on a common simple peduncle. A spike is either
- 269 Simple, continued and undivided.
- 270 Compound, when more small spikes stand on one peduncle.
- 271 Glomerated, when the small spikes are crowded together, without any certain order.
- 272 Interrupted, when the smaller spikes are placed alternately and distant one from another.
- 273 5. A *corymbus*, is formed of a spike (268), having every single flower provided with a pedicle of its own, and the whole elevated to a proportionable height, f. 32.
- 274 6. *Racemus*, a cluster, when the common peduncle has lateral branches, f. 57.
- 275 Unilateral, when all the flowers grow on one side.
- 276 7. *Panicula* a panicle, when the flowers are sparse, and grow on peduncles variously divided, f. 50.
- 277 8. *Thyrsum*, a panicle (276) gathered into an ovate (64) form.
- 278 *Umbella*, an umbel; a receptacle (13) lengthened out from one centre into filiform peduncles rising to a proportionable height, so as to resemble an umbrellæ above, f. 28. a. a. It is
- 279 Simple, when all the peduncles spring out of one and the same receptacle.
- 280 Compound, when every peduncle carries a small umbel on its top.
- 281 *Uris*.

- 281 *Umbellula sessilis*, a small sessile umbel, when a number of peduncles rise from the same centre, and stand equally all around it.
 282 *Cyma*, a receptacle rising from the same general centre, with partial ones here and there, and lengthened into peduncles all equally high at top.
 283 *Rachis*, a filiform receptacle connecting any number of florets into a long spike.
 284 *Spadix*, the receptacle of a palm-tree rising within a *spatha* or sheath, and divided into fructifying branches, f. 26.

N^o XXII. FRUCTIFICATION is,

- 285 The temporary part of a vegetable, destined to generation. And is either
 286 Simple, consisting of few flowers.
 287 Compound, when a number of flowers are set together.

A. *Calyx*, the Cup.

- 288 1. *Perianthium*, a cup contiguous to the fructification, f. 42. a.
 289 — of the fructification, containing the stamina (9) and the germen (333).
 290 — of the flower, containing stamina without a germen.
 291 — of the fruit, containing a germen without stamina.
 292 — a, Proper, belonging to any particular flower. And is either,
 293 — Monophyllous, consisting only of one leaf.
 294 — Polyphyllous, consisting of a number of leaves.
 295 — Superior, having the germen below the receptacle.
 296 — Inferior, having the germen above the receptacle.
 297 — b, Common, containing a number of flowers set together.
 298 — Calyculated, a calyx or cup, having as it were another lesser cup round its base.
 299 2. *Involucrum*, or wrapper, a cup remote from a flower, f. 28.
 300 — Universal, set under an universal umbel, (278). a.
 301 — Partial, set under a partial umbel, d d.
 302 — Proper, set under any particular flower.
 303 3. *Gluma*, a glume or chaff, the cup of any kind of grass, consisting of valves embracing one another, f. 27. a. Either
 304 — Uniflorous, containing a single flower.
 305 — Multiflorous, containing any number of flowers.
 306 *Arista*, or awn, f. 27. b. a tapering point growing out of the glume or chaff; either straight, or
 307 Tortile, twisted like a cord.
 308 4. *Amentum*, a catkin, consisting of a chaffy common receptacle like a gem or bud, f. 30.
 309 5. *Spatha*, spath or sheath, a cup opening longitudinally, f. 25.
 310 6. *Calyptra*, hood, the cowl-shaped cup of some mosses placed over the anthera (331) f. 29.
 311 7. *Volva*, the membranaceous cup of a mushroom.
 — a. *Perichetium*, a circular tuft of fine hair-like leaves surrounding the bases of the filaments in the genus *Hypnum*.

B. *Corolla*, or coloured part of a flower.

- 312 Petal, a part of a corolla, when divided into more parts than one, f. 36, f f f f f.
 313 Tube, the inferior part of a monopetalous corolla, f. 25, a.
 314 Limb, the superior spreading part of a monopetalous corolla, f. 35.
 315 *Unguis*, heel, the inferior part of a polypetalous corolla affixed to the receptacle.
 316 *Lamina*, lappet, the superior spreading part of a polypetalous corolla, f. 27.
 317 Regular, equal in figure, magnitude, and proportion of parts.
 318 Irregular, when the segments of the limb differ in figure, magnitude, or proportion of parts.
 319 Ringent, irregular (318), gaping like two lips opened very wide.
 320 *Galea-ringentis*, the vizard or upper lip of a ringent corolla.
 321 *Faux*, the throat or opening between the segments of a corolla where the tube (313) terminates.
 322 Cruciated, crossed, having four equal and patent petals.
 323 *Personata*, masked, ringent (319), but shut close between the lips by the palate.
 324 Papilionaceous, butterfly-shaped, irregular; the inferior petal being cymbiform or shaped like a boat (called the *carina* or keel); the superior ascending, (called the *vexillum* or flag); the side petals standing single (called the *alæ* or wings).
 325 Compound, consisting of a number of florets, on a common receptacle, and within a common perianthium.
 326 1. Ligulated, having all the exterior florets plain on the outside.
 327 2. Tubulous, having all the small corollæ of the florets tubulated.
 328 3. Radiated, having all the small corollæ of the disc tubulous, and those of the circumference ligulated and of a different form.
 329 Nectary, the melliferous part proper to any flower, f. 38, 39, 40, 41.

C. *Stamen*, a Chive.

- 330 Filament, the part supporting the anthera, and connecting it with the plant, f. 42, 43, 36. d d d d d.
 331 Anthera, the part of a flower which is full of pollen (332) or fine flower-dust, which it discharges as soon as itself comes to maturity, f. 36, e e e e e.
 332 Pollen, flower-dust, bursting by being brought into contact with moisture, and throwing out elastic atoms. (According to the principles of the sexual system, this is the origin of generation in plants).

D. *Pistillum*, a Pistil.

- 333 Germen, the rudiment of the unripe fruit in a flower. This is either,
 334 Superior, included in the corolla.
 335 Inferior, placed below the corolla.
 336 Style, the part of the pistil that raises the stigma (337) from the germen, f. 36, b; 42, c; 45, b.
 337 Stigma, the summit of the pistil bedewed with moisture, f. 36, a; 42, d; 45, c.

E. *Pe-*

E. *Pericarpium*, a Fruit-case, is a

- 338 1. Capsule, a fruit-case, hollow and opening in a certain determinate manner, f. 49, b. 52, 53, 54.
- 339 2. Valve, a screen or defence, with which the fruit is covered on the outside.
- 340 *Loculamentum*, a hole or cavity for lodging the seeds.
- 341 *Dissepimentum*, a partition, by which the fruit is distinguished or divided within into any number of cavities, f. 53, b. b.
- 342 Bicapsular, having two capsules (338).
- 343 Bilocular, having two cavities (340).
- 344 Tricoccous, a capsule having three protuberant knobs, and divided into three cavities within, each containing one seed.
- 345 Didymous, having two knobs protuberant on the outside.
- 346 *Siliqua*, a husk; a fruit-case having two valves, and attaching the seeds along both futures, f. 48.
- 347 *Torulosa*, having prominences swelling out on each side.
- 348 *Parallelum dissepimentum*, a parallel partition of equal breadth with the valves.
- 349 *Contrarium dissepimentum*, a cross partition narrower than the valves.
- 350 3. *Legumen*, a pod or swob; a pericarpium having two valves, and attaching the seeds only along the one future, f. 47.
- 351 *Isthmis interceptum*, having parts at regular distances straiter than the rest, so as to divide it across into different internal cavities.
- 352 4. Follicle, a pericarpium of one valve, opening longitudinally on one side, and not having the seeds attached to the future, f. 46.
- 353 5. *Drupa*, plum; a pericarpium stuffed with fleshy substance, without any valve, and containing a nut or stone in the middle, f. 60, a.
- 354 5. *Pomum*, apple or pear; a pericarpium stuffed with fleshy substance without valves, and containing a capsule or seed-case in the middle, f. 49.
- 355 6. *Bacca*, berry; a pericarpium full of pulpy or soft substance, without valves, and containing seeds otherwise naked.
- 356 7. Nidulant, nestling; seeds dispersed through a pulpy or soft substance.
- 357 8. *Strobilus*, cone; a pericarpium formed by the induration of the scales of a catkin, (308). f. 31.

F. *Semen*, Seed.

- 358 *Hilum*, speck; the external scar or mark of the seed, occasioned by its attachment to the fruit-case before it come to maturity.
- 359 *Corculum*, the original substance of a new plant within a seed.
- 360 *Corona*, crown, or dress adhering to the top of a seed, by which it is enabled to fly about after it is ripe.
- 361 *Pappus*, down; a feathery or hairy crown with which it flies, f. 55, a, b.
- 362 *Stipitatus*, stalked, having a thread betwixt it and the down.

- 463 Capillary, consisting of fine undivided hairs.
- 364 Plumose, feathery; consisting of hairs feathered on the sides.
- 365 *Cauda*, tail; a thread or membrane at the end of a seed.
- 366 *Hamus*, a hook, (247).
- 367 *Caliculus*, the interior and proper integument of a seed.
- 368 *Nux*, kernel; a seed covered with a bony shell.
- 369 *Arillus*; the outer coat of a seed which falls off of its own accord.

G. *Receptaculum*, a Receptacle.

- 370 Common, containing more flowers and fruits than one.
- 371 Compound, or composite flower; having the receptacle dilated and entire, the florets sessile.
- 372 Aggregate flower; having the receptacle dilated, and the florets subpedicellated, or standing on very short flower-stalks.

Bulbus, a bulb. *Gemma*, a gem or bud.

N° XXIII. VERNATION is the

- 373 Disposition of leaves within the bud (20).
- 374 Conduplicated, doubled together, having the opposite edges approaching each other in parallel lines.
- 375 Convolute, rolled together spirally like a cowl.
- 376 Involute, rolled inwards, having the edges on both sides rolled spirally, so as to be nearly met on the upper surface of the leaf.
- 377 Revolute, rolled backwards, having the edges on both sides rolled spirally so as to be nearly met on the back of the leaf, f. 147.
- 378 Equitant, riding, when two leaves opposite to each other close their edges, so that the one includes or clasps about the other.
- 379 Obvolute, when two edges of one leaf close on the upper surface, so that one edge divides or lies betwixt the two sides of the other.
- 380 Plicated, plaited, gathered into various plaits, f. 97.
- 381 Circinal, rolled spirally from the top to the base, so that the top comes to occupy the centre.

N° XXIV. GENERAL TERMS to be added.

- 382 *Lexus*, flexible at pleasure, *Debilis* (weak), and *flaccidus* (flagging), are almost synonymous.
- 383 Rigid, not enduring to be bent.
- 384 Articulated (229), jointed or knotted.
- 385 *Enodis*, without joints or knots.
- 386 *Premorsus*, forebitten; having the top as it were bitten off, f. 60.
- 387 Radicant, pushing down roots.
- 388 Squamous, covered with scales.
- 389 Proliferous flowers, having one flower rising within another.
- 390 Imbricated parts, one overlapping another like tiles or slates, f. 34, 166.
- 391 Squarrose, rough or scurfy, applied to the tops or irregular segments of leaves, &c. when they stand out on all sides.
- 392 Fastigiatus, trunks, branches, or peduncles rising all alike high.

393 Re-

- 393 Refupinated, turned upside down.
 394 Lacerated, a term applied to the edges of flowers or leaves when divided irregularly as if they were torn.
 395 Laciniated, divided into parts or segments in an indeterminate manner, f. 84.

TERMS omitted to be inserted in their proper places.

- 396 Brachiated branches, when each pair stands at right angles with the pairs immediately above and below them, f. 177.
 397 Aphyllous, without any leaves.
 398 Adverse leaves, turning their faces, not to the sky, but to the south; as, *Amomum*.
 399 *Arboreus*, arborescent, of the nature of a tree producing buds. A term of great lubricity.
 400 Bulbiferous, bearing bulbs.
 Bulbs are either
 401 Scaly, consisting of imbricated lamellæ, as the lily-root, f. 161.
 402 Solid, consisting of solid substance; as the tulip, f. 162.
 403 Tunicated, coated, like the common onion, f. 163.
 404 Articulated, consisting of lamellæ linked together; as the *Lathræa*.
 405 Calcareous, of a hard crumbly nature, like dry lime plaster.
 406 *Circumscissus*, parting as if cut straight over; as the capsule of *Stellaria*.
 407 Cirrhous, terminating in a tendril.
 408 Columella, the part of a fruit-case that connects the internal partitions with the seeds, f. 53, c.
 409 Intortion, the twisting of any part towards one side:
 410 To the right, supposing one's self placed in the centre;
 411 To the left, supposing one's self placed in the centre.
 412 Cotyledon, the lateral body or lobe of a seed, porous, and imbibing moisture, and afterwards falling off.
 413 *Acotyledones*, plants whose seeds have no lateral bodies or lobes; as the *Musci*.
 414 *Monocotyledones*, plants whose seeds have only one lateral body; as the Grasses, &c.
 415 *Dicotyledones*, plants whose seeds have two lateral bodies or lobes; as the *Legumina*, &c.
 416 *Polycotyledones*, plants whose seeds have many lateral bodies or lobes; as the Pines, &c.
 417 Monospermous, capsules or seed-cases that contain only one seed.
 418 Di—tri—tetra—penta,—&c. spermous, containing 2, 3, 4, 5, &c. seeds in one capsule.
 419 Polyspermous, containing many seeds.
 420 *Suberosus*, resembling cork.
 421 *Echinatus*, beset with spines or prickles, so as to resemble a hedge-hog.
 422 *Muticus*, without awn, beard, or prickle.
 423 *Pileus*, the hat or bonnet of a mushroom, which has the fructifications on its under side, f. 32, a.
 424 *Discus*, the middle part of a compound flower, consisting of regular florets.
 425 *Radius*, the rim or outward part, consisting of irregular florets.

SECT. V. Of the Sexes of Plants.

As many philosophers and botanists deny that such a thing as the distinction of sexes takes place in vegetables, it will be necessary to give a narration of the arguments employed by both parties on this subject. We shall begin with the arguments in favour of the sexes.

I. Linnæus is at great pains in tracing the notion of sexes in plants to the remotest periods of antiquity. He informs us, that Empedocles, Anaxagoras, and other ancient philosophers, not only attributed the distinction of sexes to plants, but maintained that they were capable of perceiving pleasure and pain.

Hippocrates and Theophrastus are next introduced as distinguishing the conyza, the abies, the filix, &c. into male and female. The latter of these writers affirms that the fruit of the male palm will not germinate, unless the pollen of the male be shaken over the spatha of the female previous to the ripening of the seed.

Dioscorides takes notice of a male and female mandragora, mercurialis, cistus, &c.

Pliny does not confine his views of sex to animals, but exclaims that every thing this earth produces is characterized by the distinction of sex.

From the days of Pliny to those of Cæsalpinus, who lived in the 16th century, the analogy between the vegetable and animal seems to have been entirely neglected. Cæsalpinus tells us, that the males of the oxycedrus, taxus, mercurialis, urtica, and cannabis, are barren; and that the females of these plants only bear fruit.

After Cæsalpinus, we find Dr Grew and Sir Thomas Millington engaged in a conversation concerning the utility of the stamina and styli of plants. The result of this conversation was the mutual agreement of these two eminent naturalists, that the stamina and styli of vegetables were analogous to the organs of generation in animals, and that they were adapted by nature to answer the same purposes. Dr Grew, in his anatomy of plants, after enumerating the analogies between plants and animals, concludes, that the pollen probably emits certain *visific* effluvia, which may serve for the impregnation of the seeds.

Mr Ray gave a further sanction to the doctrine of sexes, by concurring with Grew, and adding some further illustrations from analogy.

In the year 1695, Camerarius attempted to prove the sexes of plants. But, as he trusted solely to the palm-tree, and withal seemed to be doubtful as to the authenticity of the fact, he cannot be considered as having done any thing in confirmation of the sexual hypothesis.

Mr Moreland, in the year 1703, adopted the same hypothesis; but gave it a new modification, by supposing that the pollen contained the seminal plant in miniature, and consequently that it behoved one pollen at least to be conveyed into every separate seed before it could be properly impregnated. Analogy and the structure of the parts are the only arguments he employs.

Some years after this, Mr Geoffroy wrote a treatise on the sexes of plants: but as he advanced nothing new, we shall take no farther notice of him.

Vaillant,

Vaillant, in the year 1717, judiciously considering that the canal in the stylus of most plants was too narrow to admit the pollen itself, republished Dr Grew's theory of impregnation by means of a subtile feminal aura.

These are the sentiments of the principal botanists with regard to the generation of plants, till the celebrated Linnæus made his appearance as a botanical writer, who has extended the idea so far as to compose a complete system upon it.

Although Linnæus can have no claim to the supposed discovery of the sexual hypothesis, his being precisely the same with that of Dr Grew; yet, as he is the chief supporter and improver of this doctrine, we shall give a succinct narration of the arguments he makes use of in order to prove that vegetables propagate their species by a regular commerce of sexes.

In a treatise intitled, *Sponsalia Plantarum*, published as an inaugural dissertation by Wahlbom, in the first volume of the *Amanitates Academicæ*, all the arguments made use of by Linnæus in his *Fundamenta Botanica*, and other works, are collected and arranged in one view. But as Wahlbom honestly attributes all the merit of this dissertation to his great master, we shall here drop his name altogether, and give the arguments as the property of Linnæus, by whom they were originally employed.

Linnæus, then, first attempts to show, that vegetables are endowed with a certain degree of life; and, secondly, that they propagate their species in a manner similar to that of animals.

"That vegetables are really living beings (says he), must be obvious at first sight; because they possess all the properties contained in that accurate definition of life laid down by the great Dr Harvey, namely, *Vita est spontanea propulsio humorum*. But universal experience teaches, that vegetables propel humours or juices: hence it is plain that vegetables must be endowed with a certain degree of life."

Not trusting solely to a syllogism founded on a definition, Linnæus proceeds to support the life of vegetables by arguments drawn from the following particulars in their œconomy; the first of which he intitles,

"*Nutritio*.—The very idea of nutrition implies a propulsion of humours, and of course the idea of life. But vegetables derive their nourishment from the earth, air, &c. and consequently must be considered as living creatures.

"2. *Ætas*.—Every animal must not only begin to exist, and have that existence dissolved by death, but must likewise pass through a number of intermediate changes in its appearance and affections. *Infancy, youth, manhood, old age*, are characterised by *imbecility, beauty, fertility, dotage*. Are not all these vicissitudes conspicuous in the vegetable world? Weak and tender in *infancy*; beautiful and salacious in *youth*; grave, robust, and fruitful, in *manhood*; and when *old age* approaches, the head droops, the springs of life dry up, and, in fine, the poor tottering vegetable returns to that *dust* from whence it sprung.

"3. *Motus*.—No inanimate body is capable of self-motion. Whatever moves spontaneously, is endowed with a living principle: for motion depends on the spontaneous propulsion of humours; and wherever there is a spontaneous propulsion of humours, there also is life.

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That vegetables are capable of motion, is evident from the following facts: plants, when confined within doors, always bend towards the light, and some of them even attempt to make their escape by the windows. The flowers of many plants, especially those of the syngenesia class, pursue the sun from east to west, rejoicing in his beams. Who then can deny that vegetables are possessed of living and self-moving powers?

"4. *Morbus*.—The term *disease* means nothing more than a certain corruption of life. It is well known, that vegetables are subject to diseases as well as animals: when over-heated, they turn thirsty, languish, and fall to the ground; when too cold, they are tormented with the chilblain, and not unfrequently *expire*: they are sometimes afflicted with cancers; and every plant is infested with lice peculiar to its species.

"5. *Mors*.—Death is opposed to life, the former being only a privation of the latter. Experience shows, that every living creature must die. But as vegetables are daily cut off by internal diseases and external injuries; as they are subject to death from the attacks of hunger, thirst, heat, cold, &c. with what propriety could vegetables be thus said to *die*, unless we allow that they previously *lived*?

"6. *Anatomia*.—Under this article we are referred to Malpighius and Grew for the organic fibres, membranes, canals, vesicles, &c. of plants, as additional proofs of their living powers.

"7. *Organizatio*.—Vegetables not only propel humours, but also prepare and secrete a number of different juices for the fruit, the nectar, &c. analogous to the various secretions in animal bodies."

From these facts and observations, Linnæus concludes, that plants are unquestionably endowed with life as well as animals; and then proceeds in the following manner to show how these animated vegetables propagate their species.

After discussing the long exploded doctrine of equivocal generation, he lays hold of another maxim of Dr Harvey, viz. *Omne vivum ex ovo*.—"It being fully evident (says he), from the foregoing chain of reasoning, that vegetables are endowed with life, it necessarily follows, agreeable to this maxim of Harvey's, that every vegetable must in like manner derive its existence from an egg. But as vegetables proceed from eggs, and as it is the distinguishing property of an egg to give birth to a being similar to that which produced it, the seeds must of course be the *eggs* of vegetables.

"Granting then that the seeds of vegetables are intended by nature to answer the same end as the eggs of animals, and considering at the same time that no egg can be fecundated without receiving an impregnation from the male, it follows, that the seed or eggs of vegetables cannot be fecundated by any other means. Hence also the necessity of vegetables being provided with organs of generation. But where are these organs situated? The answer is easy:—We have already found impregnated seeds within the flowers of plants; and it is natural to expect that the *genitalia* should not be at a greater distance. Now, as *copulation* always precedes *birth*, and every *flower* precedes the *fruit*, the *generating faculty* must be ascribed to the *flower*, and the *birth* to the *fruit*. Again, as the *antheræ* and *stigmata* are the only essential parts of flowers, these parts must necessarily be the *organs of generation*."

Being thus far advanced, Linnæus affirms, that the *antheræ* are the *testes*, and that the pollen performs the office of the male *semen*. These affirmations he attempts to establish by the following arguments; the first of which he terms,

"1. *Præcedentia*.—The *antheræ*, or vegetable testes, always precede the fruit; and as soon as the *antheræ* come to maturity, which constantly happens before the maturity of the fruit, they continue to throw out their pollen as long as the flower lasts; but decay and fall off whenever the fruit comes to perfection.

"2. *Situs*.—The *antheræ* of all plants are uniformly situated in such a manner that the pollen may with the greatest facility fall upon the stigma or female organ.

"3. *Tempus*.—The *antheræ* and stigma always flourish at the same time, whether the flowers be of the hermaphrodite or dioicous kind.

"4. *Localumenta*.—When the *antheræ* are dissected, they discover as great a variety of structure as the pericarpia or seed capsules: for some of them have one cell, as the mercury; some two, as the hellebore, &c.

"5. *Castratio*.—If all the *antheræ* be cut off from an hermaphrodite plant, just before the flowers begin to expand, taking care at the same time that no plant of the same species grow near it, the fruit will either prove entirely abortive, or produce barren seeds.

"6. *Figura*.—When the pollen of different plants is examined by the microscope, it exhibits as great a variety of figures as is discoverable in the seeds themselves.

"The accumulated force of these arguments (concludes Linnæus) amounts to a full demonstration that the *antheræ* are the testes, and that the pollen is the semen or genitura of vegetables.

"The male organ being thus investigated, we hope (says Linnæus) that none will hesitate to pronounce the stigma to be the female organ, especially when the following observations are sufficiently attended to.

"The pistillum is composed of the germen, stylus, and stigma. The germen, being only a kind of rudiment of the future foetus or seed, ceases to exist as soon as the flower comes to maturity. Neither is the stylus an essential part, as many flowers have no stylus. But no fruit ever comes to maturity without the assistance of the stigma. It follows, that the stigma must be the female organ adapted by nature for the reception of the pollen or impregnating substance. This will appear still clearer from the following chain of reasoning.

"1. *Situs*.—The stigmata are always situated so that the pollen may with most ease fall upon them. Besides, it is remarkable, that in most plants (though not in all) the number of the stigmata exactly corresponds with the loculamenta or cells of the pericarpium.

"2. *Tempus*.—Here the observation, that the stigmata and *antheræ* constantly flourish at the same time, is repeated.

"3. *Decidentia*.—The stigmata of most plants, like the *antheræ*, decay and fall off as soon as they have discharged their proper function; which evidently shows, that their office is not to ripen the fruit, but solely to answer the important purpose of impregnation.

"4. *Abscissio*.—The argument here is precisely the

same with the castration of the *antheræ*; and the result is likewise the same, namely the destruction of the fruit.

"These arguments (concludes Linnæus) are sufficient to demonstrate, that the stigma is the female organ of generation, or that organ which is suited for the reception and conveyance of the semen to the vegetable eggs. Hence plants may be said to be in *actu veneris*, when the *antheræ* or testiculi spread their pollen over the stigma or female *vulva*."

To show how the *coitus* of vegetables is effected, is our author's next object of investigation. He affirms, that the pollen is conveyed, by means of the wind or insects, to the moist stigma, where it remains until it discharges a subtile fluid, which being absorbed by the vessels of the stigma, is carried to the seeds or ova, and impregnates them. His proofs are taken from the following particulars.

"1. *Oculus*.—When the flowers are in full blow, and the pollen flying about, every one may then see the pollen adhering to the stigma. This he illustrates by mentioning as examples the *viola tricolor*, iris, campanula, &c.

"2. *Proportio*.—The stamina and pistilla, in most plants, are of equal heights, that the pollen, by the intervention of the wind, may, with the greater facility, fall upon the stigma.

"3. *Locus*.—The stamina of most plants surround the pistillum, to give the pollen an opportunity of falling upon the stigma at every breeze of wind. Even in the monœcia class, the male flowers stand generally above the female ones, to afford an easier conveyance of the pollen to the stigma.

"4. *Tempus*.—It is remarkable that the stamina and pistilla constantly appear at the same time, even in plants belonging to the monœcia class.

"5. *Pluvia*.—The flowers of most plants expand by the heat of the sun, and shut themselves up in the evening or in rainy weather. The final cause of this must be to keep the moisture from the pollen, lest it should be thereby coagulated, and of course prevented from being blown upon the stigma.

"6. *Palmicolæ*.—That the cultivators of palm-trees were in use to pull off the spadices from the males, and suspend them over the spathæ of the females, is attested by Theophrastus, Pliny, Prosper Alpinus, Kempfer, and many others. If this operation happened to be neglected, the dates were sour and destitute of nuts. Kempfer adds this singular circumstance, that the male spadix, after being thoroughly dried and kept till next season, still retained its impregnating virtue.

"7. *Flores nutantes*.—As the pollen is specifically heavier than air, such flowers as have their pistillum longer than the stamina, hang down, or incline to one side, e. g. the fritillaria, campanula, &c. An easy admission of the pollen to the stigma is the final cause of this appearance.

"8. *Submersi*.—Many plants that grow below water, emerge when their flowers begin to blow, and swim upon the surface till they receive their impregnation, and then sink down.

"9. *Omnium florum genuina consideratio*.—Here a number of particulars are recited. We shall confine ourselves to those that are most striking and applicable to the subject.

"When

"When the flowers of the male hemp are pulled off before those of the female are fully expanded, the females do not produce fertile seeds. But as a male flower is sometimes found upon a female plant, this may be the reason why fertile seeds are sometimes produced even after this precaution has been observed.

"The tulip affords another experiment of the same purpose.—Cut off all the antheræ of a red tulip before the pollen is emitted; then take the ripe antheræ of a white tulip, and throw the pollen of the white one upon the stigma of the red; the seeds of the red tulip being thus impregnated by one of a different complexion, will next season produce some red, some white, but most variegated flowers."

In the year 1744, Linnæus published a description of a new genus, which he called *peloria*, on the supposition of its being a *hybrid* or *mule* plant, i. e. a plant produced by an unnatural commixture of two different genera. The root, leaves, caulis, &c. of this plant are exceedingly similar to those of the *antirrhinum linaria*; but the flower and other parts of the fructification are totally different. On account of its similarity to the *linaria* in every part but the flower, Linnæus imagined it to have been produced by a fortuitous commixture of the *linaria* with some other plant, although he has never yet been able to point out the father. This doctrine of the production of *mule* plants has since been greatly prized and carefully propagated by Linnæus and the other supporters of the sexual hypothesis. In the third volume of the *Amœnitates, Academicæ*, there is a complete dissertation, intitled *Plantæ Hybride*, wherein the doctrine of *vegetable mules* is much improved and extended. This dissertation contains a list of 47 mules, with their supposed fathers and mothers. For example,

The *Veronica spuria* is said to be a *mule* plant begot by the *Verbena officinalis* upon the *Veronica maritima*.

The *Delphinium hybridum*, a *mule* begot by the *Aconitum napellus* upon the *delphinium elatum*.

The *Arctotis calendula*, a *mule* begot by the *Calendula pluvialis* upon the *arctotis tristis*.

The *Asclepias nigra*, a *mule* begot by the *Cynanchum acutum* upon the *Asclepias vincetoxicum*, &c.

From the examples given in this dissertation, Linnæus draws this conclusion, That only two species of each genus existed *ab origine*; and that all the variety of species which now appear have been produced by unnatural embraces betwixt species of different genera.

Under this head Linnæus likewise quotes from Ray the story of Richard Baal gardener at Brentford. This Baal sold a large quantity of the seeds of the *brassica florida* to several gardeners in the suburbs of London. These gardeners, after sowing their seeds in the usual manner, were surprised to find them turn out to be plants of a different species from that which Baal made them believe they had purchased; for, instead of the *brassica florida*, the plants turned out to be the *brassica longifolia*. The gardeners, upon making the discovery, commenced a prosecution of fraud against Baal in Westminster-hall. The court found Baal guilty of fraud, and decreed him not only to restore the price of the seeds, but likewise to pay the gardeners for their lost time, and the use of their ground. "Had these judges

(says Linnæus) been acquainted with the sexual hypothesis, they would not have found Baal guilty of any crime, but would have ascribed the accident to the fortuitous impregnation of the *brassica florida* by the pollen of the *brassica longifolia*."

Linnæus next proceeds to celebrate the utility of insects, because they convey the pollen of the male to the stigma of the female. "In this way (says he), it is reasonable to think that many dioicous plants are impregnated. Nay, even the hermaphrodites themselves are greatly obliged to the different tribes of insects, which, by fluttering and treading in the corolla, are constantly scattering the pollen about the stigma.

"Upon the whole then, (concludes Linnæus), the coitus of vegetables is evident to a demonstration. This coitus is nothing more than the conveyance of the pollen to the stigma, to which it adheres till it bursts, and discharges a subtile elastic fluid. This fluid or aura is absorbed by the vessels of the stylus, and carried directly to the ovarium or germen, where the mysterious work of impregnation is fully completed."

THESE are the arguments employed by Linnæus and other advocates for the sexual commerce of vegetables.—Let us next attend to those employed by the opposers of this hypothesis.

It is admitted by Pontedera, Dr Alston, &c. that some of the ancients applied the terms *male* and *female* to several plants. But then they deny that these terms conveyed the same ideas to the ancients that they do to the moderns. *Male* and *female*, when applied to plants, were to the ancients mere terms of distinction, serving only as trivial names to distinguish one species or variety from another. The ancients were ignorant of the very characters which constitute the difference between what is called a *male* and *female* plant among the moderns. Theophrastus, Dioscorides, Pliny, and, in a word, the whole ancient botanical writers, confound the very notion of the modern sexes: they call the real female, or seed bearing plant, the *male*; and the male, or barren plant, the *female*. Nay, they have even applied the terms *male* and *female* to many plants which bear nothing but hermaphrodite flowers.

Such is the nature of this controversy, that it cannot be determined with any degree of certainty, but by experiments made upon dioicous plants. If a female plant can produce fertile seeds without having any communication with the pollen of the male, the use of this pollen with respect to the impregnation of seeds must of necessity be entirely superseded.

Now, both Camerarius and Dr Alston tried these experiments with the same success. Those two eminent botanists took female plants of the mercury, spinage, and hemp; transplanted them at a great distance from any males of the same genus, and besides had them inclosed by double rows of hedges. The result was, that each of these plants produced great quantities of fertile seeds. Tournefort made the same trial upon the lupulus, Miller upon the bryony, and Geoffroy upon the mays; and all of them declared that the seeds of these plants were as fertile as if they had been surrounded by a thousand males.

Linnæus, in his first argument for the coitus of plants, refers every man to the evidence of his senses.

"Do we not see (says he) the stigma of almost every hermaphrodite

hermaphrodite flower covered over with the pollen or impregnating substance? Do not we see the parietaria, the urtica, &c. by violent explosions, discharging their pollen in the open air, that it may be carried in that vehicle to the stigmata of their respective females?—All this is admitted by the opposers of the sexes: but then they deny that these explosions, &c. are intended to create any intercourse between the male and the female; and further allege, that this ejection of the pollen is intended by nature to throw off something excrementitious, or at least something which, if retained, would prove noxious to the fructification.

Linnæus takes his second argument from the proportion which the stamina bear to the stylus, alleging that they are generally of the same height.—This observation (says the anti-sexualists) is not only contrary to experience, but, allowing it to be universal, no conclusion can be drawn from it either for or against the sexual hypothesis.

The third argument is taken from the *locus* or situation of the stamina with respect to the stylus: “and as the male flowers in the monœcia class stand always above the female flowers, it must be concluded (says Linnæus), that the intention of nature, in this disposition of the parts, is to allow a free and easy access of the pollen to the stigma.”—But the stamina cannot be said to surround the pistillum in the monandria and diandria classes: and the position of the male flowers in the monœcia class is a mere chimera; for in the ricinus, one of the examples which Linnæus mentions in confirmation of his doctrine, the female flowers stand uniformly some inches above the males.

That the stamina and pistilla generally come to perfection at the same time, and that this happens even in the dioicous plants, is Linnæus's fourth argument. But, as it is acknowledged by Linnæus himself, that there are many exceptions with respect to this fact, the opposers of the sexual hypothesis allege that it carries the best answer in its own bosom.

The fifth argument is founded on the circumstance of some flowers shutting up their petals in rainy or moist evenings.—But many flowers do not shut themselves up, either in the night or moist weather, as the passion-flower, &c. The *lychnis noctiflora*, *mirabilis peruviana*, &c. open their flowers in the night, and shut them at the approach of the sun. Hence this is another final cause (say the anti-sexualists) perverted to support a favourite hypothesis.

We come now to the culture of the palm-tree, which is the sixth and most plausible argument employed by the sexualists. Of this, the most authentic account we have is the following by Dr Hasselquist, in one of his letters to Linnæus, dated Alexandria May 18th 1750. “The first thing I did after my arrival was to see the date-tree, the ornament and a great part of the riches of this country. It had already blossomed; but I had, nevertheless, the pleasure of seeing how the Arabs assist its fecundation, and by that means secure to themselves a plentiful harvest of a vegetable, which was so important to them, and known to them many centuries before any botanist dreamed of the difference of sexes in vegetables. The gardener informed me of this before I had time to inquire; and would show me, as a very curious thing, the male and female of the date or palm-trees: nor could he conceive how I, a Frank, lately

arrived, could know it before; for (says he) all who have yet come from Europe to see this country, have regarded this relation either as a fable or miracle. The Arab seeing me inclined to be further informed, accompanied me and my French interpreter to a palm-tree, which was very full of young fruit, and had by him been wedded or fecundated with the male when both were in blossom. This the Arabs do in the following manner: When the spadix has female flowers, that come out of its spatha, they search on a tree that has male flowers, which they know by experience, for a spadix which has not yet burst out of its spatha: this they open, take out the spadix, and cut it lengthwise in several pieces, but take care not to hurt the flowers. A piece of this spadix with male flowers they put lengthwise between the small branches of the spadix which hath female flowers, and then lay the leaf of a palm over the branches. In this situation I yet saw the greatest part of the spadices which bore their young fruit; but the male flowers which were put between were withered. The Arab besides gave me the following anecdotes: First, unless they, in this manner, wed and fecundate the date-tree, it bears no fruit. Secondly, they always take the precaution to preserve some unopened spathæ with male flowers from one year to another, to be applied for this purpose, in case the male flowers should miscarry or suffer damage. Thirdly, if they permit the spadix of the male flowers to burst or come out, it becomes useless for fecundation: it must have its *maidenhead* (these were the words of the Arab), which is lost in the same moment the blossoms burst out of their case. Therefore the person who cultivates date-trees must be careful to hit the right time of assisting their fecundation, which is almost the only article in their cultivation. Fourthly, on opening the spatha, he finds all the male flowers full of a liquid which resembles the finest dew; it is of a sweet and pleasant taste, resembling much the taste of fresh dates, but much more refined and aromatic: this was likewise confirmed by my interpreter, who hath lived 32 years in Egypt, and therefore had opportunities enough of tasting both the nectar of the blossoms and the fresh dates.”

Now, though this account seems fully to confirm the fact, viz. that such a practice obtains among the Arabs, and that they assert its efficacy in fecundating the trees, it is certain (say the opposers of this doctrine), that no intelligent person, who is not already wedded to an hypothesis, will attempt to found an argument upon the assertions of a people so full of ridiculous superstitions. Before Dr Hasselquist, or any other person, can draw any argument from the above mentioned account, he ought to see the experiment several times repeated, with his own eyes, and not take it upon the word of a people who, besides their superstition, may very probably find it their interest to impose upon travellers.

Mr Milne, author of the Botanical Dictionary, however, relates an experiment, near akin to the above mentioned, which merits some attention: “In the garden of M. de la Serre, of the Rue S. Jacques at Paris, was a female turpentine tree, which flowered every year, without furnishing any fruit capable of vegetation. This was a sensible mortification to the owner, who greatly desired to have the tree increased.

Met.

Messieurs Duhamel and Joffieu very properly judged that they might procure him that pleasure by the assistance of a male pistachio tree. They sent him one very much loaded with flowers. It was planted in the garden of M. de la Serre, very near the female turpentine tree, which the same year produced a great quantity of fruits, that were well conditioned, and rose with facility. The male plant was then removed; the consequence of which was, that the turpentine-tree of M. de la Serre in none of the succeeding years bore any fruit that, upon examination, was found to germinate."

Upon this experiment it is observed by the antifemalists, that, though it were a thousand-times repeated, it never could be decisive. The nature of the controversy, say they, is such, that one experiment is more decisive in favour of their opinion, than 10,000 can be against them. The reason is plain: If there is such a thing as a sexual intercourse in vegetables, it is as wonderful that any seeds should be perfected without that intercourse, as that a virgin should have a child; the last is not in the least more extraordinary than the first. One experiment, therefore, which shows that seeds may be perfected without such sexual intercourse, is either to be resolved into a miracle, or must prove absolutely decisive against the sexual system; while numberless experiments such as that above mentioned could prove nothing, because we know not what effect vegetables may have by growing in each other's neighbourhood, independent of any sexual intercourse.

In Milne's Botanical Dictionary, under the article *Saxus Plantarum*, the author quotes Dr Alston's experiments partially. The facts recorded by Dr Alston are as follow. 1. Three sets of spinach, planted at a great distance from each other, proved all of them fertile, and ripened plenty of seeds, which were found to answer as well as other spinach seed. 2. A plant of hemp growing by itself, being taken care of, produced about 30 good seeds, though in a situation very much exposed, and plucked up too soon, on account of bad weather, in the autumn. 3. This experiment, which is the most remarkable of the three, we shall give in the Doctor's own words. "In the spring of 1741, I carried two young seedling plants of the French mercury, long before there was any in, from the city physic garden, the only place where it was then to be found in this country, to the king's garden at the Abbey; which are more than 700 yards distant from one another, with many high houses, trees, hedges, and part of a high hill between them: and planted one of them in one inclosure, where it was shaded from the sun the greatest part of the day; and the other in another 25 yards distant, exposed to the south and west. Both plants ripened fertile seeds; and the last shed them so plentifully, that it proved a troublesome weed for several years, though none of the species was to be found in that garden for more than 20 years preceding."

Of this experiment Mr Milne hath not taken any notice; but upon the other two, has the following remark. "The result of these, and such like experiments, can be accounted for, on the principle of the sexes, in no other way than on the supposition that some male flowers have been intermixed with the female, and operated the fecundation in question. This appears the more probable, as only a part of the seeds

in the above experiments attained to perfect maturity, so as to be capable of vegetation."

The seventh argument of Linnæus is taken from the *flores nutantes*.—The pistils of these flowers, according to Linnæus, are always longer than the stamina; and nature has assigned them this pensile posture, that the pollen, which is specifically heavier than air, may the more conveniently fall upon the stigma.—But the pistils of the campanula, lilium, and many other *flores nutantes*, are not longer than the stamina. Besides, granting this were uniformly the case; yet, as the pollen is heavier than air, this posture must of necessity either make the pollen miss the pistillum altogether, or, at any rate, it can only fall upon the back part of the pistil in place of the stigma; and, of course, such a direction would rather tend to frustrate than promote the impregnation of the seed.

The eighth argument is taken from the *plantæ submersæ*, which are said to emerge as soon as their flowers begin to blow, lest the pollen should be coagulated or washed off by the water.—But many submarine and aquatic plants fructify entirely below water; and, supposing they did not, the same argument would equally prove it to be the intention of nature, that the pollen should be blown away by the winds, as that it should be subservient to the impregnation of the seed.

The ninth and last argument is intitled *Omnium florum genuina consideratio*; which (say the antifemalists) is nothing more than a collection of vague observations upon the structure and œconomy of particular plants, some of them true, others false, but all of them evidently thrust in as supports to a favourite hypothesis.

Thus the dispute rested some years ago; but of late there has appeared a translation of one of Linnæus's works upon the subject, which, though published in 1759, was but little known in this country. A treatise on the Sexual System had also been published by the Abbé Spalanzani, in which he not only opposed the Linnæan doctrine, but treated it with ridicule, though without taking any notice of this last publication, which he seems to have been ignorant of. In this he mentions an experiment with hemp similar to some of those already related; but which was also tried by Linnæus, and in his hands turned out the very reverse of what it did with Spalanzani. In the treatise alluded to, Linnæus mentions Sir Thomas Millington as the first among the moderns who thought of the distinction of sexes in plants. He was Savilian professor at Oxford; and Dr Grew, in his anatomy of plants, relates, that, in a conversation on the nature of the antheræ of flowers, Sir Thomas hinted, that those parts might probably be analogous to the male organs of animals, and serve for the impregnation of the fruit. Grew improved on the idea and pursued it. That the subject, however, may be properly understood, our author is of opinion, that we should first accurately understand the nature of vegetable bodies; and in order to do this, we ought first to consider the operations of nature in the human frame, and from thence continue our researches through the various tribes of inferior animals, till at last we arrive at the vegetable creation. In like manner, to illustrate the generation of plants, we must likewise take our first lights from the animal kingdom, and pursue the same chain till we come to vegetables. This

subject, indeed, he owns to be so obscure, that no naturalists has hitherto been able to say any thing satisfactory concerning it; he only mentions some remarkable facts concerning the production of mule animals from the copulation of two individuals of different species. In the horse-kind we see two different kinds of mules produced. "From the mare and male ass (says he) proceeds the mule properly so called, which in its nature, that is, in its medullary substance and nervous system, agrees with its mother; but in its cortical substance and outward form, in its mane and tail, resembles the ass. Between the female ass and the horse, the other kind of mule is engendered, whose nature or medullary substance resembles that of the ass; but its cortical structure that of the horse. If the he-goat of Angora copulates with the common she-goat, the kid, by that means procured, inherits the external structure and valuable coat of its father; while, on the other hand, if the common he-goat impregnates the goat of Angora, the kid produced has the same external form, and bears the same worthless hair with its father. Hence it seems probable, that the medullary substance, with what Malpighi calls the keel (*carina*), and the nervous system, are latent in the egg of the mother; the cortical substance, or vascular system, being derived from the father."

These cortical and medullary substances are previously explained by our author to be those of which both animal and vegetable bodies are composed. By the medullary substance in animal bodies, he means the spinal marrow arising from the organized brain, and sending off the nerves; by the cortical substance the vessels with the heart attached to them, by which the medullary part is nourished. In vegetables, the cortical part nourishes the plant, not only by its root, but with its whole surface. For a small branch torn from the parent stem, and placed in water, imbibes nourishment at its pores. Thus the *Fuci*, and other marine vegetables, are nourished without a root, solely by the pores dispersed through their whole substance. The bark of trees every year deposits its gelatinous internal layer, which is added to the wood, and assimilates itself to it. The medullary, which is the other essential part of vegetables, is multiplied and extended without end; and whenever it is entirely lost, the death of the plant necessarily follows. In examining this substance, we must be careful, in two cases, that we be not misled; first, by the straws of grasses, and by other hollow stems, where the medulla lines the inside of the bark; and secondly, by large trees, whose trunks become perfectly solid throughout, except in the very summits of the branches. The wood performs the office of bones, when there is no longer any occasion for the medulla in that part; and trees, although become hollow, continue nevertheless to grow so long as this substance remains in the extreme branches. It is by no means necessary that the medulla should have any connection with the root, as it is only nourished by the cortical substance of the plant, and is therefore increased at its upper extremity without end if it meets with no resistance. In those animals whose spinal marrow is surrounded by a bony covering, as in the larger and more perfect kinds, this substance never comes out of its confinement; and the harder its case, the more absolutely is its increase prevented; but in the smaller tribes of worms, where

this covering is less rigid, a perpetual and unlimited increase of the animal takes place.

"The most important parts of the flower, and which are absolutely essential to it, (our author proceeds to observe †), are the stamina and pistilla. So † *Dissert. on the Sexes of Plants*, Smith's translation, p. 20. et seq. essential are they, that among the many thousands of flowers with which we are acquainted, no one can be found not furnished with both these organs. The stamina derive their origin from the substance of the wood, which was originally formed from the inner bark, and they may therefore be said to spring from the cortical substance of the vegetable. This is perfectly evident in the *Asarum* (*Asarabacca*), whose twelve stamina proceed from twelve fibres in the inner bark. Double flowers illustrate the same fact: in them, the stamina being weakened and dissolved by excess of nourishment, the woody substance re-assumes the softness of the inner bark, of which it was originally formed. All stamina consist of vessels containing the pollen, or impregnating powder, which they discharge in due time, not without the strictest observance of certain natural laws. The form of these vessels, like that of the capsules of the fruit, is accurately defined, as well as their cells, their particular manner of bursting, and the pollen which they contain; this pollen, likewise, is no less certain and uniform in its figure, size, and colour, than the seeds themselves.

"The pistillum is the only part which originates from the medullary substance, and is therefore invariably situated in the centre of the flower. It always contains the rudiments of the seed, which, in process of time, ripen into fruit. The rudiments of the fruit are called the *germen*, or seed-bud; this has constantly another organ connected with it, named the *stigma*, which is in its highest degree of vigour and perfection during the time of flowering.

"Another circumstance worthy of attention is, that the root, which the first year of its growth is large and filled with medullary pulp, the following season becomes hollow, in producing the stem, flowers, and seed; all this pulp being conveyed to the flower, and seeming to be only destined to the formation of seed, so many new and distinct animations being formed from it as there are rudiments of new plants. This is particularly observable in the turnip.

"Thus vegetables, like insects, are subject to a metamorphosis; with this difference only, that their flowers are fixed to one spot, instead of being able, like insects, to fly from place to place; and that their nourishment is not given them by means of peculiar organs for the formation of chyle. We have seen, that the outer bark becomes calyx, the internal bark corolla, the wood stamina, and the medulla pistillum; the fructification exhibiting the internal parts of a plant naked and unfolded. We have likewise seen, that the fructification puts an end to vegetation in the part from whence it arises, stopping the progress of the medulla, which would otherwise have extended itself without end by the branches, and occasioning the division of that medulla into a number of seeds, each endowed with a separate living principle. But as the medulla exists naked in the germen, it cannot support itself, or make any farther progress, without the assistance of the cortical substance which it has left; it must therefore receive this assistance by some means or other,

other, and in fact does receive it from the stamina and their pollen, which owe their origin to the woody matter derived from the inner bark, and originally generated by the outer bark. But if it happens that the cortical substance is able to invest the medullary rudiments of the seed in the flower itself, the plant becomes viviparous, as in *fesluca*, *aira*, and *poa vivipara*, in which nearly the same thing takes place as in the medulla of other plants, which remains in the branches, and is variously distributed, being at once both clothed and nourished by the bark, and enabled to form new branches, just as it happens in the compound animals, or *fertularia*.

"The organs common in general to all plants are, 1. The root, with its capillary vessels, extracting nourishment from the ground. 2. The leaves, which may be called the *limbs*, and which, like the feet and wings of animals, are organs of motion; for being themselves shaken by the external air, they shake and exercise the plant. 3. The trunk, containing the medullary substance, which is nourished by the bark, and for the most part multiplied into several compound plants. 4. The fructification, which is the true body of the plant, set at liberty by a metamorphosis, and consists only of the organs of generation; it is often defended by a calyx, and furnished with petals, by means of which it in a manner flutters in the air.

"Many flowers have no calyx, as several of the lily tribe, the *bippuris*, &c.; many want the corolla, as grasses, and the plants called *apetalous*; but there are none destitute of stamina and pistilla, those important organs destined to the formation of fruit. We therefore infer from experience, that the stamina are the male organs of generation, and the pistilla the female; and as many flowers are furnished with both at once, it follows that such flowers are hermaphrodites. Nor is this so wonderful, as that there should be any plants in which the different sexes are in distinct individuals; for plants being immoveably fixed to one spot, cannot, like animals, travel in search of a mate. There exists, however, in some plants, a real difference of sex. From seeds of the same mother, some individuals shall be produced, whose flowers exhibit stamina without pistilla, and may therefore be properly called *males*; while the rest, being furnished with pistilla without stamina, are therefore denominated *females*: and so uniformly does this take place, that no vegetable was ever found to produce female flowers, without flowers furnished with stamina being produced, either on the same individual, or on another plant of the same species, and *vice versa*.

"As all seed-vessels are destined to produce seeds, so are the stamina to bear the *pollen*, or fecundating powder. All seeds contain within their membranes a certain medullary substance, which swells when dipped into warm water. All pollen, likewise, contains in its membrane an elastic substance, which, although very subtle and almost invisible, by means of warm water often explodes with great vehemence. While plants are in flower, the pollen falls from their antheræ, and is dispersed abroad, as seeds are dislodged from their situation when the fruit is ripe. At the same time that the pollen is scattered, the pistillum presents its stigma, which is then in its highest vigour, and, for a portion of the day at least, is moistened with a fine dew. The stamina either surround this stigma, or, if

the flowers are of the drooping kind, they are bent towards one side, so that the pollen can easily find access to the stigma; where it not only adheres by means of the dew of that part, but the moisture occasions its bursting, by which means its contents are discharged. What issued from it, being mixed with the fluid of the stigma, is conveyed to the rudiments of the seed. Many evident instances of this present themselves to our notice; but I have no where seen it more manifest than in the jacobean lily (*amaryllis formosissima*), the pistillum of which, when sufficient heat is given the plant to make it flower in perfection, is bent downwards, and from its stigma issues a drop of limpid fluid, so large that one would think it in danger of falling to the ground. It is, however, gradually re-absorbed into the style about three or four o'clock, and becomes invisible till about ten the next morning, when it appears again; by noon it attains its largest dimensions; and in the afternoon, by a gentle and scarcely perceptible decrease, it returns to its source. If we shake the antheræ over the stigma, so that the pollen may fall on this limpid drop, we see the fluid soon after become turbid, and assume a yellow colour; and we perceive little rivulets, or opaque streaks, running from the stigma towards the rudiments of the seed. Some time afterwards, when the drop has totally disappeared, the pollen may be observed adhering to the stigma, but of an irregular figure, having lost its original form. No one, therefore, can assent to what Morland and others have asserted, that the pollen passes into the stigma, pervades the style, and enters the tender rudiments of the seed, as Loewenhoeck supposed his worms to enter the ova. A most evident proof of the falsehood of this opinion may be obtained from any species of *mirabilis* (marvel of Peru), whose pollen is so very large, that it almost exceeds the style itself in thickness, and, falling on the stigma, adheres firmly to it; that organ sucking and exhausting the pollen, as a cuttle-fish devours every thing that comes within its grasp. One evening in the month of August I removed all the stamina from three flowers of the *mirabilis longiflora*, at the same time destroying all the rest of the flowers which were expanded; I sprinkled these three flowers with the pollen of *mirabilis jalappa*; the seed-buds swelled but did not ripen. Another evening I performed a similar experiment, only sprinkling the flowers with the pollen of the same species; all these flowers produced ripe seeds.

"Some writers have believed, that the stamina are parts of the fructification, which serve only to discharge an impure or excrementitious matter, and by no means formed for so important a work as generation. But it is very evident, that these authors have not sufficiently examined the subject; for as, in many vegetables, some flowers are furnished with stamina only, and others only with pistilla, it is altogether impossible, that stamina situated at so very great a distance from the fruit as on a different branch, or perhaps on a separate plant, should serve to convey any impurities from the embryo.

"No physiologist could demonstrate, *à priori*, the necessity of the masculine fluid to the rendering the eggs of animals prolific; but experience has established it beyond a doubt. We therefore judge *à posteriori* principally of the same effect in plants.

"In:

"In the month of January 1760 the *antholyza cunonia* flowered in a pot in my parlour, but produced no fruit, the air of the room not being sufficiently agitated to waft the pollen to the stigma. One day, about noon, seeing the stigma very moist, I plucked off one of the antheræ, by means of a fine pair of forceps, and gently rubbed it on one of the expanded stigmata. The spike of flowers remained eight or ten days longer; when I observed, in gathering the branch for my herbarium, that the fruit of that flower only on which the experiment had been made had swelled to the size of a bean. I then dissected this fruit, and discovered that one of the three cells contained seeds in considerable number, the other two being entirely withered.

"In the month of April I sowed the seeds of hemp (*cannabis*) in two different pots. The young plants came up so plentifully, that each pot contained 30 or 40. I placed each by the light of a window, but in different and remote apartments. The hemp grew extremely well in both pots. In one of them I permitted the male and female plants to remain together, to flower and bear fruit, which ripened in July; and being macerated in water and committed to the earth, sprung up in twelve days. From the other, however, I removed all the male plants as soon as they were old enough for me to distinguish them from the females. The remaining females grew very well, and presented their long pistilla in great abundance, these flowers continuing a very long time, as if in expectation of their mates; while the plants in the other pot had already ripened their fruit, their pistilla having, quite in a different manner, faded as soon as the males had discharged all their pollen. It was certainly a beautiful and truly admirable spectacle, to see the unimpregnated females preserve their pistilla so long green and flourishing, not permitting them to begin to fade till they had been for a considerable time exposed, in vain, to the access of the male pollen. Afterwards, when these virgin plants began to decay through age, I examined all their calyxes in the presence of several botanists, and found them large and flourishing, although every one of the seed-buds was brown, compressed, membranaceous, and dry, not exhibiting any appearance of cotyledons or pulp. Hence I am perfectly convinced, that the circumstance which authors have recorded, of the female hemp having produced seeds, although deprived of the male, could only have happened by means of pollen brought by the wind from some distant place. No experiment can be more easily performed than the above; none more satisfactory in demonstrating the generation of plants.

"The *Clusia tenella* was in like manner kept growing in my window through the months of June and July. The male plant was in one pot, the female in another. The latter abounded with fruit, not one of its flowers proving abortive. I removed the two pots into different windows of the same apartment: still all the female flowers continued to become fruitful. At length I took away the male entirely, leaving the female alone, and cutting off all the flowers which it had already born. Every day new ones appeared from the axilla of every leaf; each remained eight or ten days; after which their footstalks turning yellow, they fell barren to the ground. A botanical friend, who had amused

himself with observing this phenomenon with me, persuaded me to bring from the stove in the garden a single male flower, which he placed over one of the females ones, then in perfection, tying a piece of red silk round its pistillum. The next day the male flower was taken away, and this single seed-bud remained and bore fruit. Afterwards I took another male flower out of the same stove, and with a pair of slender forceps pinched off one of its antheræ, which I afterwards gently scratched with a feather, so that a very small portion of its pollen was discharged upon one of the three stigmata of a female flower, the two other stigmata being covered with paper. This fruit likewise attained its due size; and on being cut transversely, exhibited one cell filled with a large seed, and the other two empty. The rest of the flowers, being unimpregnated, faded and fell off. This experiment may be performed with as little trouble as the former.

"The *Datisca cannabina* came up in my garden from seed ten years ago, and has every year been plentifully increased by means of its perennial root. Flowers in great number have been produced by it; but being all female, they proved abortive. Being desirous of procuring male plants, I obtained more seeds from Paris. Some more plants were raised; but these likewise, to my great mortification, all proved females, and bore flowers but no fruit. In the year 1757, I received another parcel of seeds. From these I obtained a few male plants, which flowered in 1758. These were planted at a great distance from the females; and when their flowers were just ready to emit their pollen, holding a paper under them, I gently shook the spike or panicle with my finger, till the paper was almost covered with the yellow powder. I carried this to the females, which were flowering in another part of the garden, and placed it over them. The cold nights of the year in which this experiment was made, destroyed these datiscas, with many other plants, much earlier than usual. Nevertheless, when I examined the flowers of those plants which I had sprinkled with the fertilizing powder, I found the seeds of their due magnitude; while in the more remote datiscas, which had not been impregnated with pollen, no traces of seeds were visible.

"Several species of *Momordica*, cultivated with us, like other Indian vegetables, in close stoves, have frequently born female flowers; which, although at first very vigorous, after a short time have constantly faded and turned yellow, without perfecting any seed, till I instructed the gardener, as soon as he observed a female flower, to gather a male one and place it above the female. By this contrivance we are so certain of obtaining fruit, that we dare pledge ourselves to make any female flowers fertile that shall be fixed on.

"The *Jatropha urens* has flowered every year in my hot-house; but the female flowers coming before the males, in a week's time dropped their petals, and faded before the latter were opened; from which cause no fruit has been produced, but the germina themselves have fallen off. We have therefore never had any fruit of the *jatropha* till the year 1752, when the male flowers were in vigour on a tall tree at the same time that the females began to appear on a small *jatropha* which was growing in a garden-pot. I placed this pot under the other tree, by which means the female

flowers

flowers bore seeds, which grew on being sown. I have frequently since amused myself with taking the male flowers from one plant, and scattering them over the female flowers of another, and have always found the seeds of the latter impregnated by it.

"Two years ago I placed a piece of paper under some of these male flowers, and afterwards folded up the pollen which had fallen upon it, preserving it so folded up, if I remember right, four or six weeks, at the end of which time another branch of the same *jatropha* was in flower. I then took the pollen, which I had so long preserved in paper, and strewed it over three female flowers, the only ones at that time expanded. These three females proved fruitful, while all the rest which grew in the same bunch fell off abortive.

"The interior petals of the *Ornithogalum*, commonly, but improperly, called *Canadense*, cohere so closely together, that they only just admit the air to the germen, and will scarcely permit the pollen of another flower to pass: this plant produced every day new flowers and fruit, the fructification never failing in any instance; I therefore, with the utmost care, extracted the antheræ from one of the flowers with a hooked needle; and, as I hoped, this single flower proved barren. This experiment was repeated about a week after with the same success.

"I removed all the antheræ out of a flower of *Cheilidonium corniculatum* (scarlet horned poppy), which was growing in a remote part of the garden, upon the first opening of its petals, and stripped of all the rest of the flowers; another day I treated another flower of the same plant in a similar manner, but sprinkled the pistillum of this with the pollen borrowed from another plant of the same species: the result was, that the first flower produced no fruit, but the second afforded very perfect seed. My design in this experiment was to prove, that the mere removal of the antheræ from a flower is not in itself sufficient to render the germen abortive.

"Having the *Nicotiana fruticosa* growing in a garden-pot, and producing plenty of flowers and seed, I extracted the antheræ from a newly-expanded flower before they had burst, at the same time cutting away all the other flowers; this germen produced no fruit, nor did it even swell.

"I removed an urn, in which the *Asphodelus fistulosus* was growing, to one corner of the garden, and from one of the flowers which had lately opened I extracted its antheræ; this caused the impregnation to fail. Another day I treated another flower in the same manner: but bringing a flower from a plant in a different part of the garden, with which I sprinkled the pistillum of the mutilated one, its germen became by that means fruitful.

"*Ixia chinensis*, flowering in my stove, the windows of which were shut, all its flowers proved abortive. I therefore took some of its antheræ in a pair of pincers, and with them sprinkled the stigmata of two flowers, and the next day one stigma only of a third flower; the seed-buds of these flowers remained, grew to a large size, and bore seed; the fruit of the third, however, contained ripe seed only in one of its cells.

"To relate more experiments would only be to fatigue the reader unnecessarily. All nature proclaims the truth I have endeavoured to inculcate, and every

flower bear witness to it. Any person may make the experiment for himself, with any plant he pleases, only taking care to place the pot in which it is growing in the window of a room sufficiently out of the reach of other flowers; and I will venture to promise him that he will obtain no perfect fruit, unless the pollen has access to the pistillum."

SECT. VI. Of the Natural Method of Classification.

BESIDES all the abovementioned methods of classing and distributing plants into their different orders, genera, &c. which are deduced from the fructification, and are therefore called *artificial*, Linnæus and most other botanists are of opinion that there is a natural method, or nature's system, which we should diligently endeavour to find out. That this system, say they, is no chimera, as some imagine, will appear particularly from hence, that all plants, of what order soever, show an affinity to some others; and thus, as formerly observed, not only the virtues of a great number of species may be ascertained, but we may know with certainty how to find a proper succedaneum for plants which cannot easily be had.—Linnæus divides vegetables into the 58 natural methods following.

1. *Palmeæ*. These are perennial, and mostly of the shrub and tree kind. The stem is in height from 2 to 100 feet and upwards. The roots form a mass of fibres which are commonly simple and without any ramifications. The stem is generally simple, without branches, cylindrical, and composed of strong longitudinal fibres. The leaves, which are a composition of a leaf and a branch, by Linnæus called *frondes*, are of different forms; being sometimes shaped like an umbrella or fan; sometimes singly or doubly winged; the small or partial leaves, which are often three feet in length, being ranged alternately. The branches, or principal leaves, are six, eight, ten, or twelve feet long; the length varying according to the age and size of the plant. They are covered at first with a thick brown dust, like those of the ferns. The base of the leaves frequently embraces the greater part of the stem. The flowers are male and female upon the same or different roots; except in stratiotes, which bears hermaphrodite flowers only; and palmetto, in which the flowers are hermaphrodite and male upon distinct roots. The flowers are all disposed in a panicle or diffused spike, except in the hydrocharis, stratiotes, and villisneria; in which they proceed singly from the wings or angles of the leaves. The common calyx, in this order, is that termed a *spatha* or *sheath*, and has either one or two valves. The spadix, or head of flowers protruded from the sheath, is generally branched. Each flower is generally furnished with a perianthium or proper flower-cup, consisting of three leaves or divisions that are small and permanent. The petals are three in number, of a substance like leather, and permanent like the leaves of the calyx. The flowers of zamia have no petals. The stamina are from 2 to 20 and upwards, cohering slightly at their base. The seed-buds are from one to three in number, placed in the middle of the flower, and supporting a like number of styles which are very short. The seed-vessel is generally a pulpy fruit of the berry or cherry kind, containing one cell filled with fibrous flesh, and covered with a skin which is of a substance

like leather. The seeds are in number from one to three in each pulpy fruit, of a hard bony substance, round or oval, and attached by their base to the bottom of the fruit.—These plants, particularly the seeds, are astringent, and of efficacy in dysenteries.

2. *Piperitæ*. These plants are mostly herbaceous and perennial. The stalks of pothos creep along rocks and trees, into which they strike root at certain distances. The greatest height which any of them is known to attain is 15 feet; the greater part do not exceed three or four. The fleshy roots of many of these plants are extremely acrid when fresh. They lose this pungent quality, however, by being dried, and become of a soapy nature. The smell of many of them is extremely fetid, frequently resembling that of human excrements. The flowers, however, of an Ethiopian dracunculus or arum, and the cover in which they are involved, are said to emit a very fragrant odour. With regard to their virtues, these plants are commonly astringent.

3. *Calamariæ*. In this class the base of the leaf, which embraces the stalk like a glove, has no longitudinal aperture, but is perfectly entire. The stalk is generally triangular, and without knots or joints. The roots of some are long and knotty; in others they are composed of fleshy fibres which pierce deep into the ground: and in others, of a bulb. The flowers are either hermaphrodite, or male and female upon the same root. The mode of inflorescence in this order is generally a spike; sometimes a capitulum or head. The calyx is either a gluma or an amentum. The corolla is wanting. The filaments of the stamina are three in number, short, slender like a hair, and sometimes bristly. The antheræ are generally long, slender, and erect. The seed-bud is very small, blunt, and sometimes three-cornered. The style is thread-shaped, and of the length of the scaly calyx. The stigmata are generally three in number; slender, hairy, and sometimes permanent. The virtues, uses, and sensible qualities, of this order of plants are the same with those of the following.

4. *Gramina*. Most of these plants are annual or perennial herbs; some of them creep upon the ground, others are erect. The roots, in the greatest number, are creeping, and emit fibres from each knot or joint; in others they are simply branching and fibrous. The stems and branches are round. The leaves are simple, alternate, entire, very long, and commonly narrow. They form below a sort of sheath, which embraces or surrounds the stem, and is generally cleft or divided on one side through its whole length. The flowers are either hermaphrodite, male and female on the same root, or hermaphrodite and male on the same root. They proceed either singly from the sheath of the leaves, or are formed into a panicle or loose spike. The calyx and corolla in this order are not sufficiently ascertained; in some a single scale or husk, in others two, supply the place of both covers; some grasses have four husky scales, two of which serve for the calyx, and the other two for the corolla; some have five; others six, four of which constitute the calyx, and the other two are termed improperly enough the *husky petals*. The corolla is sometimes composed of one petal with two divisions; and in general the husks of the calyx are always placed opposite to those of the corolla. The stamina are generally three in number, and placed irregularly with re-

gard to the situation of the calyx and corolla. The antheræ are long, furnished with two cells, and slightly attached to the filaments. The seed-bud is placed upon the same receptacle as the calyx, corolla, and stamina. The style is generally double, and crowned with a hairy stigma or summit. The seed-vessel is wanting. The seeds are single, oval, and attached below to the bottom of the flower.—The roots of the grasses are opening; such as have an aromatic smell are stomachic; their seeds are mealy, mucilaginous, and nourishing. All the parts of these plants are wholesome.

5. *Tripetaloidæ* (from *tres*, three; and *petalum*, a petal). These plants have no very striking characters, and are nearly allied to the grasses. All the genera of this order have not the circumstance expressed in the title.

6. *Ensatæ*. This order, which is very nearly allied to the grasses and liliaceous plants, furnishes a very beautiful collection of perennial herbs, which are of different heights, from one inch to 15 feet. The roots are tuberous or fleshy, and garnished with fibres; the stalks are simple, and commonly flat or compressed on the sides. The leaves are simple, alternate, entire, sword-shaped, and, like the liliaceous plants, form at their origin a sheath or glove, which in the greatest number is cleft or divided through the whole length, except at the base, where it is entire, and embraces the stalk like a ring. The flowers are hermaphrodite, and generally proceed from the summit of the stalks either singly, in an umbel, a spike, or in a panicle. In pontederia they proceed from the wings or angles of the leaves either singly or in an umbel. Most of these plants want the perianthium or flower-cup; the flowers burst from a common cover or sheath, termed by Linnæus *spatha*, which in this order is frequently permanent. The petals are in number from one to six. The stamina are generally three. The seed-bud is placed sometimes above the flower, sometimes below it. The style is generally single, and crowned with a triple stigma. The seed-vessel is a dry capsule, generally of an oblong shape, and opens at three valves, discovering the same number of cells, each inclosing a quantity of roundish seeds.—These plants resemble the liliaceous in their powers and sensible qualities; very few of them, however, are used in medicine.

7. *Orchideæ*. The roots of many of these plants are composed of one or more fleshy tubercles or knobs, attached to the lower part of the stem, and sending forth fibres from the top. Those of orchis bear an obvious resemblance to the scrotum in animals: from which circumstance the genus has derived its name. The leaves are of a moderate size, inscribed with a number of longitudinal nerves or ribs, and without any footstalk. At their origin they form round the stalk a kind of sheath, which is long, entire, cylindrical, but not furnished, like the grasses and some other plants, with a crown at top. The flowers are hermaphrodite, and placed at the summit of the stalk either in a spike or in a panicle. The calyx is that sort termed by Linnæus a *spatha* or *sheath*, that bursting open protrudes a head or cluster of flowers, termed the *spadix*, which have no perianthium or flower-cup. The petals are five in number, and very irregular. The nectarium in this order is remarkably conspicuous; yet so different in the different genera, that Linnæus has employed it for his principal character or mark of di-

distinction, instead of the root, which had chiefly engaged the attention of former botanists. It has the appearance of a sixth petal. The filaments are always two in number, and placed upon the pistillum or female organ. The antheræ are erect, and generally covered by the upper lip of the nectarium. The seed-bud is either oblong or pillar-shaped, twisted like a screw, and universally placed below the receptacle of the flower. The style is single, very short, and forms one substance with the inner margin of the nectarium. The seed-vessel is generally a capsule with one cavity or cell, and three valves or openings, which are keel-shaped, and open on the angular sides, being jointed both at the bottom and top. The seeds are numerous; very small, like saw-dust; and attached, without footstalks, to a slender receptacle or rib, which extends itself lengthwise in the middle of each inclosure or valve. The plants of this order are reckoned strong aphrodisiacs.

8. *Scitamineæ*. This class consists of beautiful exotic plants, all natives of very warm countries. Some of them furnish exquisite fruits; but though the plants rise very high, they are perennial only by their roots. Those which have only one filament, have in all their parts an aromatic odour, and an acrid or poignant taste; qualities, however, possessed in a much greater degree by the roots, which are hot and resinous.

9. *Spathaceæ*, so called because their flowers are protruded from a *spatha* or sheath. They are nearly allied in habit and structure to the liliaceous plants, from which they are chiefly distinguished by the *spatha* out of which their flowers are protruded.

10. *Coronariæ*. These plants are herbaceous, perennial, and from one inch to 15 feet high. The roots are either bulbous, fibrous, or composed of small fleshy knots, which are jointed at top. The bulbs either consist of scales laid over each other like tiles, or are solid. The stem of the liliaceous bulbous plants is properly wanting; what supplies its place being nothing else than the base of the leaves, which, wrapping or enfolding each other, form at bottom a roundish fleshy bulb hitherto distinguished, though perhaps improperly, by the name of *root*. In the others the stem is simple, that is, has few branches, and is either furnished with leaves, or rises naked. The branches are alternate and cylindrical. The leaves are simple, alternate, and entire. Those next the root, termed *radical leaves*, generally form at their origin a sheath, which in a great number is entire; that is, goes all round; whilst in others, it is cleft or divided longitudinally on one side. The flowers are universally hermaphrodite, except in white hellebore, which has both male and hermaphrodite flowers mixed together on the same root. The flowers are sometimes single, and terminate the stem; sometimes they form an umbel, sometimes a spike, and sometimes a panicle. The calyx or flower cup, in this order, according to Linnæus, is generally wanting. In strict propriety, however, the single cover that is present in most of these plants, though beautifully coloured, ought to be denominated a *calyx*; as its divisions, generally six in number, are placed opposite to the stamina. The petals, or, to speak more properly, the coloured leaves of the flower, are in number from one to six. Plants which have a single petal, have the limb or upper part split into six divisions or segments. The petals in some

species are rolled or turned back. The nectarium is various; in the lily it is a longitudinal line which runs through each petal, and reaches from the base to the middle. In crown imperial, it is a small hollow or pore, formed at the base of each petal; in asphodel it consists of six very small valves, which, approaching, form a globe, and are inserted into the base of the petal; in hyacinth, it is composed of three melliferous pores, situated on the top of the seed-bud. In pineapple, it is a small scale lying within the substance of each petal above the base; and in albuca, or bastard star of Bethlehem, it consists of two sharp pointed bodies proceeding from the furrows of the seed-bud, and covered by the broader base of the three fertile filaments. In some species of lily the nectarium is hairy; in others it is naked. The stamina are six in number; erect, and inserted into the common receptacle, if the flower consists of many petals; into the tube, or divisions of the corolla, if it consists of one. The antheræ are long, commonly divided below, and slightly attached by their sides to the filaments on which they turn like a vane or the needle of a compass. The seed-bud is single, and placed either within the flower-cup or below it. The style is single, thread-shaped, and generally of the length of the petals. The stigma is generally single, of a conic form, and shaggy or hairy at the extremity. The seed vessel is generally a capsule, divided externally into three valves, internally into three cells.—With respect to the powers of the plants of this order, it may be affirmed in general, that such as have little taste or smell, as the roots of tulip, and star of Bethlehem, are perfectly innocent; whilst those which have a heavy nauseous smell, as squill, hyacinth, crown imperial, and spider-wort, are at least suspicious, and frequently prove noxious.

11. *Sarmentosæ*, (from *sarmentum*, a long shoot, like that of a vine.) This order consists of plants which have climbing stems and branches, that, like the vine, attach themselves to the bodies in their neighbourhood for the purpose of support. These plants are far from being a true natural assemblage; in fact they scarce agree in a single circumstance, except that expressed in the title, which is far from being peculiar to this order.

12. *Holeraceæ*. This order consists of plants which are used for the table, and enter into the æconomy of domestic affairs: it contains trees, shrubs, perennial, and annual herbs. Some of the woody vegetables retain their green leaves during the winter. The roots are very long, and frequently spindle-shaped; from the knots on the stems and branches of such plants as creep on the ground, or float on the water, proceed fibrous and branching roots. The stems and young branches are cylindric; and in the greatest part of the aquatic plants of this order, the stalks are hollow within. The buds are of a conic form, and naked; that is, not accompanied with scales. The leaves are generally simple, entire, alternate, and attached to the branches by a cylindric foot-stalk, which is sometimes very long, but commonly very short. Some plants of this kind have two stipulæ or scales which are attached to the branches near the origin of the foot-stalk of each leaf. In many others, instead of stipulæ, each leaf bears on its foot-stalk a membranaceous sheath, which is cylindric, frequently fringed on the margin, and pierced or penetrated

trated by the stem. The flowers are either hermaphrodite; male and female upon the same root; male and female upon different roots; hermaphrodite and male on the same root; hermaphrodite and female on the same root; or hermaphrodite and male on different roots.

13. *Succulentæ*. This order consists of flat, fleshy, and juicy plants, most of them ever-greens. They are astringent, refreshing, and very wholesome.

14. *Gruinales* (from *grus* a crane). These consist of *geranium*, vulgarly called *cranes-bill*, and a few other genera which Linnæus considers as allied to it in their habit and external structure. This order furnishes both herbaceous and woody plants. The roots are sometimes fibrous, sometimes tuberous. In some species of wood-forrel they are jointed. The stems are cylindric; the young branches, in some, nearly square. The buds are of a conic form, and covered with scales. The leaves are either simple or compound. The flowers are hermaphrodite; they proceed from the wings of the leaves either singly or in clusters. The calyx or flower-cup consists of five distinct leaves, or of one leaf divided almost to the bottom into five parts. It generally accompanies the seed-bud to its maturity. The petals are five in number, spreading, and frequently funnel-shaped. The stamina are generally ten in number, awl-shaped, erect, and of the length of the petals. The stamina are generally oblong; and frequently attached to the filaments by the middle, so as to lie, and sometimes to veer about, upon them. The seed-bud is either oblong or five-cornered. The number of styles is either one or five. In *tribulus*, the style is wanting. The seed-vessel is generally a five-cornered capsule, with one, three, five, or ten cells. The seeds are generally equal in number to the internal divisions or the cells of the seed-vessel; one seed being placed in each cell.

15. *Inundata*. The plants of this order are aquatic, of low stature, herbaceous, and mostly perennial. The roots are fibrous. The stem is generally wanting. In its place are an assemblage of leaves, which wrapping or enfolding each other mutually form a sheath; and from the middle of this sheath is produced the foot-stalk of the flower. The leaves are sometimes alternate, sometimes placed in whirls round the stem. In a great many genera the foot-stalk is extended at its origin into a membranaceous substance, which forms a sheath that is cleft through the whole length, on the side opposite to the leaf. The flowers are hermaphrodite, or male and female on the same root. The flower-cup is either wanting, or consists of three, four, or five divisions or leaves, which accompany the seed-bud to its maturity. The petals are generally wanting. The stamina are in number from 1 to 16 and upwards. The filaments in some genera are so short, that they seem wanting. The antheræ are short, and generally marked with four longitudinal furrows. The seed-buds are in number from one to four, the style is frequently wanting. The seed-vessel is universally wanting, except in *Elatine*, which has a dry capsule, with four external openings, and the same number of cells. The seeds are generally four in number.

16. *Calyciflora*, (from *calyx* the flower-cup, and *flos* the flower), consisting of such plants as have the stamina (the flower) inserted into the calyx. All the plants

of this order are of the shrub and tree kind. Some of them rise to the height of 12 or 14 feet; others not above two or three. The roots are branching, fibrous, and woody. The stems are cylindric. The branches, when young, are cornered; the buds of a conic form, and without scales. The leaves are simple, alternate, and attached to the branches by a very short foot-stalk. The flowers are either male or female upon distinct roots, or hermaphrodite and male on the same root. The calyx is a perianthium composed of one leaf divided into two, three, or four segments. It is commonly placed upon the germen or seed-bud, which accompanies it to maturity. The corolla is universally wanting, except in *trophis*, the male plants of which, according to Linnæus, have four obtuse and spreading petals. The stamina are generally four in number, slender like a hair, short, placed at a considerable distance from the style, and inserted into the tube of the calyx. The pistillum is composed of a roundish germen, crowned with the calyx; a single thread-shaped style; and a cylindric stigma. The seed-vessel is either an obtuse oval fruit of the cherry kind, or a globular berry with one cell, containing a roundish seed. The plants of this order are astringent.

17. *Calycanthemæ*, (from *calyx* the flower-cup, and *anthos* the flower); consisting of plants, which, among other characters, have the corolla and stamina inserted in the calyx. This order furnishes trees, shrubs, and annual, biennial, and perennial herbs. The herbaceous annuals are by much the most numerous. The roots are branching and fibrous; the stems and branches cylindric, square, or four-cornered while young. The buds are of a conic form, and without scales. The leaves are generally either alternate, simple, and attached to the branches by a short foot-stalk, or opposite at the bottom of the stem; and in some, alternate towards the top. They are universally sessile; that is, attached to the branches, without any foot-stalk. The calyx is universally a perianthium, and generally monophyllous, or composed of one leaf. The corolla consists of four, five, and six petals, which are attached to the tube of the calyx, and are sometimes placed alternate, sometimes opposite to the divisions of the limb. The stamina, which are in number from 4 to 20 and upwards, are attached to the tube of the calyx either on its margin or lower down. When the number of stamina is double the divisions of the calyx, the stamina which stand opposite these divisions are a little longer than the rest. The antheræ are generally of a hemispherical figure; frequently cleft or slit below; and by that aperture attached slightly to the filaments, on which they often veer about like a vane or needle. They are surrounded longitudinally, and open on the sides into two loculi or cells. The pollen, or male dust, consists of a number of minute particles, of an oval figure, yellow and transparent. The germen, or seed-bud, is placed either above or under the receptacle of the flower. The style is single, thread-shaped, and of the length of the stamina. The stigma is generally single and undivided. The seed-vessel is a capsule, which is generally divided internally into four loculi or cells. The seeds are numerous, minute, and frequently three-cornered. The plants of this order are reckoned astringent.

18. *Bicornes*, (from *bis* twice, and *cornu* a horn), plants whose antheræ have the appearance of two horns.

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This appearance, however, is not very conspicuous, unless in a few genera. The plants of this order are all of the shrub and tree kind. The roots are branching and fibrous. The stems and branches are cylindrical. The buds conic, sometimes covered with scales, and sometimes naked. The leaves are generally alternate. In most plants of this order they are either sessile, or supported by a very short foot-stalk, which is semi-cylindric, and flat above. The flowers are universally hermaphrodite, except in one genus, the Indian date-plum, where hermaphrodite and male flowers are produced in the same species upon distinct roots. They proceed either solitary, or in a corymbus from the angles formed by the leaves and branches: or hang down in spikes and clusters at the end of the branches; each flower having a small scale or floral leaf placed under it. In most plants of this order the calyx is placed around or below the germen. The calyx is universally a perianthium, and generally monophyllous or of one piece, deeply divided into four or five segments, which are permanent, that is, accompany the germen to its maturity. The segments are often acute, and sometimes coloured. The corolla is generally monopetalous, and bell or funnel-shaped; the figure, however, is not very constant, even in plants of the same genus. The limb, or upper part of the petal, is generally divided into four or five segments, which are sometimes rolled back, sometimes bent inwards. The limb too is sometimes slightly cut, sometimes divided almost to the bottom. The tube, or lower part of the petal, is cylindrical, and generally of the same length with the calyx. The number of stamina is from 4 to 20. These are generally erect, and attached to the lower part of the tube of the corolla. The antheræ are bifid or forked below, and, being slightly attached to the filaments, are frequently inverted in such a manner as to exhibit the appearance of two horns at top. The germen or seed-bud, is generally roundish, and seated above the receptacle. The style is single, thread-shaped, of the same length with the corolla, and in a few genera permanent. The seed-vessel is either a capsule with five cells, a roundish berry, or an oblong four cornered nut with two cells.—The plants of this order are astringent.

19. *Hesperideæ*, (from the Hesperides, whose orchards are said to have produced golden apples). The plants of this order are of the shrub and tree kind, and mostly evergreen. The bark of the stalks is slender, and comes off in thin plates. The leaves are generally opposite and covered with small transparent, points. In some, the leaves are placed opposite at the bottom of the stalks, and alternate above. The buds are of a conic form, the flowers generally hermaphrodite; they proceed from the wings of the leaves either singly, or in clusters like ivy-berries. The calyx is placed above the seed-bud, and accompanies it to its maturity. The petals are three, four, or five in number, and stand upon the brims of the tube of the calyx. The seed-bud is large, oblong, and placed below the receptacle of the flower. The style is single, awl-shaped, of the length of the stamina, and terminated with a single stigma. The seed-vessel in some genera is a berry furnished with one or three cells; a capsule with four cells, or of the nature of a cherry, containing a stone. The seeds are generally numerous, small, and oblong. The leaves and fruits are astringent, the berries esculent.

20. *Rotaceæ*, (from *rota*, a wheel), consisting of plants with one wheel-shaped petal without a tube. These resemble in quality those of the order of *precieæ*, to which they are in all respects very nearly allied; but very few of them can be said in strict propriety to possess the character specified in the title.

21. *Precieæ*, (from *precus* early). These consist of primrose, an early flowering plant, and some others which agree with it in habit and structure, though not always in the character or circumstance expressed in the title. These plants, which possess no striking uniform characters, are, in general, innocent in their quality; yet the root of sow-bread is dangerous, if taken internally.

22. *Caryophylleæ*. All the plants of this order are herbaceous, and mostly annual. Some of the creeping kinds do not rise above an inch, and the tallest exceed not seven or eight feet. The roots are branching, fibrous, and of a moderate length. The stems are cylindrical. The branches proceed from the wings or angles of the leaves, and are generally opposite, and as it were jointed at each knot. In some species of *cerastrum* the branches are square. The leaves are generally placed opposite in pairs, so as to resemble a cross; and are slightly united at the bottom by their foot-stalks, which form a sort of glove round the stem. The hairs are simple, like silk. The flowers are hermaphrodite; but some have male and female flowers upon distinct roots. They either stand single on their foot-stalks, and proceed from the wings or angles of the leaves and branches, or are disposed in a spike, corymbus, umbel, or panicle. The calyx is permanent, and composed either of one piece with five indentments, or of four or five distinct leaves. The corolla generally consists of five petals, which have claws of the length of the calyx; and a spreading limb, sometimes entire, but oftener cleft or divided in two. The stamina are in number from 3 to 15, and of a moderate length. When their number is double the divisions of the calyx, they are attached alternately to the claws of the petals, those so attached being shorter than the rest; the remaining stamina are inserted into the common receptacle, and stand opposite to the segments of the calyx. In some genera of this order the number of stamina is found to vary, even in the different flowers of the same plant. The antheræ are short, hemispherical, marked with four longitudinal furrows, frequently divided or cleft below, most commonly erect; sometimes, however, *in-cumbent*, that is, fastened to the filaments by the sides. The pointal is composed of a single seed-bud, which is generally roundish, sometimes cornered. The styles are thread-shaped, of the length of the stamina, and crowned with a simple stigma, which is sleek or smooth externally, and slightly hollowed or vaulted within. The seed-vessel is a dry capsule, of an oval form of the length of the calyx, and consists of one or three cells. The plants of this order are innocent in their quality; they abound in a watery sort of phlegm, and have bitter seed. With respect to their virtues, they are reckoned astringent, attenuating, and deterfive.

23. *Tribilataæ*, (from *tres* three, and *bilum* an external mark on the seed); consisting of plants with three seeds, which are marked distinctly with an external cicatrix or scar, where they are fastened within to the fruit.

24. *Corydales*, (from *κορυς* a helmet); consisting of plants which have irregular flowers, somewhat resembling a helmet or hood. These plants are mostly herbaceous and perennial. The roots are tuberous or knobby. The stems are generally branching. The leaves are alternate, sometimes simple, but most commonly winged. The foot-stalk of the leaves is strait or narrow, except in *epimedium*, where it is large, and has a membranous edge or border. The flowers are universally hermaphrodite. They proceed either singly from the wings and angles of the leaves, or are collected in clusters at the end of the branches. The calyx consists of two, four, five, or six leaves, which are frequently coloured, and commonly fall off immediately before, or very soon after, the expansion of the petals. The corolla is generally irregular; of one, or many pieces; gaping; and furnished with a nectarium, which is very different in the different genera. The stamina are in number from two to six, and of a proportionate length, except in honey-flower, which has two shorter than the rest. The filaments are distinct, except in two genera, fumitory and *monniera*, which have two sets of strings or filaments united in a cylinder. The antheræ are universally distinct, except in *impatiens*, where they are formed into a cylinder divided at the base. The seed-bud is generally roundish, but sometimes angular or cornered. The style is commonly single, extremely short, slender, or thread-shaped, and crowned with a simple stigma. The seed-vessel is either a hollow blown-up berry, a capsule of one cell, a longish, or a roundish pod. The seeds are generally numerous and round.

25. *Putamineæ*, (from *putamen* a shell): consisting of a few genera of plants allied in habit, whose fleshy seed-vessel or fruit is frequently covered with a hard woody shell. Most of these plants are acrid and penetrating; and yield, by burning, a great quantity of fixed alkali. With respect to their virtues, they are powerful aperients. The Indians pretend that the fruit of a species of caper-bush, which they call *baducca*, extinguishes the flames of love.

26. *Multifiliquæ*, (from *multus* many, and *siliqua* a pod); consisting of plants which have more seed-vessels than one. From the etymology of the term, one would naturally imagine that the seed-vessels in question were of that kind called by Linnæus *siliqua*, or pod; but the fact is, that not a single plant of this order bears pods; the greater part having many dry capsules, and the remainder being furnished properly with no seed-vessel, but bearing numerous distinct seeds. Plants of this order are mostly perennial herbs; the stems of some are erect; others creep upon the ground, and produce roots near the origin of each leaf; lastly, others climb, and attach themselves to the bodies in their neighbourhood, either by the foot-stalk of the leaves, or by tendrils and claspers which terminate the foot-stalk. The greatest height of those which rise erect, seldom exceeds eight feet. Those which climb, rarely exceed 15 or 20 feet. The roots are generally fleshy. In some they are hand-shaped; in others finger-shaped, or cylindric. In some species of hellebore and ranunculus they are divided into spherical knobs. Lastly, in some plants of this order, the roots are fibrous. The stems and young branches are cylindric. The leaves,

which are of different forms, being sometimes simple and entire, sometimes hand-shaped or winged, are generally alternate. The foot-stalk, which is sometimes cylindric, sometimes angular, is membranous, and very large at its origin, surrounding a great part of the stem from which it proceeds. The flowers are hermaphrodite. They proceed either singly from the wings of the leaves or termination of the branches, or terminate the branches in a spike, panicle, or head. The calyx in some is wanting; in others it is generally composed of five pieces, which fall off with the petals. The petals are in number from 4 to 15; generally equal, and sometimes disposed in two or three series; five is the prevailing number. The stamina are in number from 5 to 300, distinct, and attached generally in several rows or series to the receptacle. The seed-buds are generally numerous; the style is frequently wanting. In some the seed-vessel is wanting; in others it is composed of several dry capsules, each containing a single cell. The seeds are numerous, and frequently angular. Most of these plants are acrid, and many of them poisonous. In general, plants that have a great number of stamina are noxious in their quality. When burnt, these plants furnish a fixed alkali; by distillation there is drawn from them a kind of nitrous and aluminous substance. With respect to their virtues, they are caustic and purgative.

27. *Rhæadææ*, consisting of poppy, and a few genera which resemble it in habit and structure. These plants, upon being cut, emit plentifully a juice, which is white in poppy, and yellow in the others. With respect to their virtues, they seem to operate principally upon the nerves. Their juice is soporific and narcotic, their seeds less so, their roots aperient. Applied externally, they are slightly corrosive.

28. *Luridæ*, consisting of plants whose pale and ominous appearance seems to indicate something baleful and noxious in their natural quality. Most of these plants are herbaceous and perennial. Many of them are of the masked tribe of flowers; others resemble these in their general appearance, but differ from them essentially in the equality of their stamina. The roots are generally branched, sometimes tuberous. The stems and branches are cylindric. The leaves are generally simple, and placed alternate. The flowers are hermaphrodite. They proceed either singly or in clusters from the angle formed by the leaves and branches. In some species of lycium, they terminate the branches. The calyx is generally of one piece deeply divided into five parts. The corolla consists of one petal, which is either bell, funnel, or wheel-shaped. The stamina are four or five in number; and those either of equal lengths, as in the greater, or unequal. The seed-bud is placed above the receptacle of the flower. The style is single; and is terminated by a summit which is hemispherical, and frequently channelled or furrowed. The seed-vessel, in such as have equal stamina, is a berry; in the rest, it is generally a capsule. The seeds are numerous, and frequently kidney-shaped.—These plants in general are poisonous. They have an insipid taste, and a nauseous disagreeable smell.

29. *Campanacææ*, (from *campana* a bell); plants with bell-shaped flowers. The plants of this order are herbaceous and perennial. The roots are either spindle-shaped,

shaped, or branching and fibrous. The stems are round. The branches are generally alternate. The leaves are simple, alternate, and commonly attached to the branches by a semi-cylindric foot-stalk, which is furrowed above. The indentments are terminated by a small white tubercle or knob, which renders them conspicuous. The flowers are hermaphrodite; and proceed either solitary from the wings of the leaves, or are collected into a spike and head at the end of the flower-stalk. The calyx is universally a perianthium situated upon or round the germen, and generally composed of one leaf deeply divided into five segments. The corolla is monopetalous, and of the bell, funnel, or wheel-shape. The tube, in flowers of the bell and wheel-shape, is very short; in those of the funnel-shape, very long. In Greek valerian, the tube is shut with five valves, which are placed on its apex or top. The limb or upper part of the corolla is deeply divided into five segments, which spread, and are alternate with the divisions of the calyx. The corolla is generally permanent. The stamina are five in number, attached to the base of the tube of the corolla, alternate with its divisions, and opposite to those of the calyx. The filaments are distinct; very large at their origin; and frequently approach so as to form a sort of vault, which covers the summit of the germen. They are slender and awl-shaped above. The antheræ are very long; oval; marked with four longitudinal furrows, either distinct, or united in a cylinder. The pollen is composed of very small, spherical, white, shining, and transparent particles. The germen is roundish, and situated either wholly or in part under the flower. The style is generally single, and of the length of the stamina or corolla. The stigma is commonly single, but deeply divided. The seed-vessel is a roundish capsule, generally divided into three cells, and furnished externally with the same number of valves. The seeds are small, numerous, attached to a receptacle in the centre of the fruit, generally rounded, and sometimes cornered.—This order furnishes many excellent medicines. The plants abound with a white milky juice, which, upon the stalk being cut, flows out in great quantities.

30. *Contorta*, (from *con* together, and *torqueo* to twist); consisting of plants which have a single petal that is twisted or bent towards one side. This order furnishes trees, shrubs, and fat succulent plants, some of which retain their leaves during the winter. The herbaeous vegetables in this order are generally perennial. The roots are sometimes branching, but commonly fleshy, succulent, and garnished with fibres or strings like those of turnip. The stems are round and in some genera pulpy and succulent. The branches are sometimes placed alternate, and sometimes opposite. The buds are of a conic form, and naked or without scales. The leaves are sometime alternate, sometimes placed opposite in pairs, and not seldom surround the stem in whorls. They are attached to the branches by a cylindrical foot stalk, which is short, and frequently united to the foot-stalk of the opposite leaf. The defensive and offensive weapons in this order are a downy sort of pubescence, and simple, or forked prickles, which, in some genera, issue from the wings of the leaves. The flowers are hermaphrodite; and stand either singly upon their footstalks, or are collected into umbels and clusters. These bunches or collections of

flowers sometimes terminate the branches, sometimes proceed from the angles of the branches, and sometimes stand at the side of the wings without issuing from them. The flower-cup is composed of one leaf divided almost to the base in five unequal segments, which embrace each other, and are permanent, or accompany the seed-bud to its maturity. The corolla consists of one petal, which in the different genera is bell, salver, funnel, or wheel-shaped. The limb, or upper spreading part of the petal, is generally divided into five equal parts, which are slightly bent or twisted to the left, and embrace or unfold each other like the petals of the mallow tribe. The tube is generally long and cylindrical; sometimes clube-shaped, and often wanting. In several flowers of this order the petal is accompanied with that species of superfluity termed a *nectarium*. In the different genera, however, it assumes very different appearances. The stamina are five in number, short, equal, attached at the same height to the tube of the petal, alternate with its divisions, and opposite to those of the calyx. The antheræ are generally erect, and frequently approach so as to form a compact body in the middle of the flower. The seed-bud is either single or double. In some the style is wanting. The stigma is frequently double. The seed-vessel in some genera is a pulpy fruit, of the berry and cherry kind; but most frequently that species termed by Linnæus *conceptaculum*, and *folliculus*, which has one valve or external inclosure, opens lengthways on one side, and has not the seeds fastened to it. Two of these dry fruits, with a single cell, compose the seed-vessel of most plants of this order. The seeds are generally numerous, and in several genera crowned with a long pappus or downy wing like that of the compound flowers, by means of which they easily disperse and sow themselves.—The plants of this order being cut, emit a juice which is generally milky, and sometimes of a greenish white. From the circumstance of their abounding in this milky juice, the greater part are deemed poisonous; repeated observations having established this aphorism, That milky plants, except those of the plain compound flowers, are generally of a baneful destructive nature, and ought at least to be administered with caution. With respect to their sensible qualities, they are bitter; particularly the seed roots and bark, in which resides their principal virtue.

31. *Veprecule*, (from *vepres* a briar or bramble), consisting of plants resembling the daphne, dirca, gnidia, &c. but which, however, do not constitute a true natural assemblage.

32. *Papilionaceæ*, plants that have papilionaceous flowers, i. e. somewhat resembling a butterfly in shape; of which number are all the leguminous plants. The plants of this order are of very different duration; some of them being herbaeous, and those either annual or perennial; others woody vegetables of the shrub and tree kind, a few of which rise to the height of 70 feet and upwards. The herbaeous plants of this order generally climb; for, being weak and as it were helpless of themselves, they are provided by nature with tendrils, and even sharp-pointed hooks, at their extremities, to fasten upon the neighbouring trees or rocks; or the stalks are endowed with a faculty of twisting themselves, for the purpose of support, around the bodies in their neighbourhood. The pea, vetch, and kidney-

ney-bean, afford familiar examples of this appearance. The shrubs and trees of this order are mostly armed with strong spines. The roots are very long, and furnished with fibres; but some genera have fleshy knobs or tubercles placed at proper intervals along the fibres. The stems are cylindric, as likewise the young branches, which are placed alternately: those which climb, twist themselves from right to left, in a direction opposite to the apparent motion of the sun. The bark of the large trees is extremely thick and wrinkled, so as to resemble a net with long meshes; the wood is very hard in the middle, and commonly coloured or veined. The buds are hemispherical, without scales, and proceed from the branches horizontally a little above the angle which they form with the leaves. The leaves are alternate, and of different forms, being either simple, finger-shaped, or winged. This last form is very common; the lobes or lesser leaves are entire, and sometimes placed in pairs, but most commonly the winged leaf is terminated by an odd lobe. The winged or pinnated leaves of this order have a daily or periodical motion, depending upon the progress of the sun in his diurnal course. The common footstalk of the winged and compound leaves is marked on the upper surface with a cavity or furrow which runs through its whole length. The flowers are hermaphrodite; and proceed either from the wings of the leaves, or from the extremity of the branches. The calyx is a perianthium of one leaf, bell-shaped, bunching out at the bottom, and cut on its brim or margin into five irregular divisions or teeth; the lowermost of which, being the odd one, is longer than the rest: the other four stand in pairs, of which the uppermost is shortest, and stands farthest asunder. The bottom of the calyx is moistened with a sweet liquor like honey, so may be deemed the nectarium of these plants. The petals are four or five in number, very irregular, and from their figure and position bear an obvious resemblance to a butterfly expanding its wings for flight. These petals have been characterized by distinct names: the upper one, which is commonly the largest, is termed the *standard*, (*vexillum*); the two side petals, the *wings*, (*alæ*); and the lowermost, which is generally united at top, and divided at bottom, the *keel*, (*carina*). The stamina are generally ten: these are either totally distinct, or united by the filaments into one or two bundles involving the seed-bud. In the latter case, where there are two sets of united filaments, one of the sets is composed of 9 stamina, which are united into a crooked cylinder, that is cleft on one side thro' its whole length; along this cleft lies the tenth filament or stamen, which constitutes the second set, and is often so closely attached to the second bundle, that it cannot be separated without some difficulty. The antheræ are small, round, marked with four longitudinal furrows, and slightly attached to the filaments. In lupine, the antheræ are alternately round and oblong. The seed-bud is single, placed upon the receptacle of the flower, oblong, cylindrical, slightly compressed, of the length of the cylinder of the united stamina by which it is involved, and sometimes elevated by a slender footstalk which issues from the centre of the calyx. The style is single, slender, and generally crooked or bent. The stigma is commonly covered with a beautiful down, and placed immediately under the antheræ. The seed-vessel is that sort of pod termed a *legumen*, which is of an

oblong figure, more or less compressed, with two valves, and one, two, or more cavities. These cavities are often separated, when ripe, by a sort of joints. The seeds are generally few in number, round, smooth, and fleshy. Jointed pods have generally a single seed in each articulation. The seeds are all fastened along one suture, and not alternately to both, as in the other species of pod termed *siliqua*.—The plants of this family are, in general, mucilaginous. From the inner bark of most of them flows, either naturally or by incision, a clammy liquor, which dries and hardens like gum; the juice of others is sweet like sugar; some taste bitter, and are purgative, emetic, or even mortal. A species of eastern astragalus, with goats-rue leaves, is said to be remarkably caustic, and to burn the tongue excessively when chewed. In general, however, these plants are soft and clammy. With respect to their virtues, the plants of this order are highly emollient; some of them are vulnerary and astringent; and the root of anonis, or rest-harrow, is diuretic.

33. *Lomentaceæ*, (from *lomentum*, a colour used by painters). Many of these plants furnish beautiful tinctures, and some of them are much used in dyeing. They very much resemble the last order, differing only in the following particulars. 1. In all plants of this order, except milk-wort, the stamina are distinct. The flower is not shaped like a butterfly, but is less irregular, and frequently consists but of one petal. The leaves are sometimes simple, but most commonly winged. The seeds are commonly marked with a circular furrow on both sides. Like those of the leguminous tribe, the plants of this order are generally mucilaginous. From the inner bark of the greater number exsudes, either naturally or by incision, a mucilaginous liquor, which sometimes dries upon the plant, and becomes a gummy substance.

34. *Cucurbitaceæ*, (from *cucurbita* a gourd); consisting of plants which resemble the gourd in external figure, habit, virtues, and sensible qualities.—The plants of this order, which generally climb, and have long diffused branches, are mostly herbaceous and perennial. The roots in the perennial plants of this order are shaped like those of the turnip; in the annuals they are branching and fibrous. The stems are cylindric and succulent. The young branches have generally five corners. In some species of passion-flower they are square. The leaves are alternate, angular, and sometimes hand-shaped. They are attached to the branches by a foot-stalk, which is pretty long and cylindrical, without any furrow. From the wing or angle of each of the upper leaves proceeds a tendril, which is either simple or branching, and twists itself spirally round the different bodies in its neighbourhood, for the purpose of supporting and training of the branches. The lower leaves have no tendril. The flowers are either hermaphrodite or male and female. In this last, the male flowers are generally separated from the female upon the same root; and that either in the same wing or angle of the leaves, or in different angles. The flower-cup, in the female flowers, is placed upon the seed-bud; and generally consist of one bell-shaped leaf, that is deeply divided into five unequal segments, and unlike the other plants which have the calyx seated upon the fruit, falls off with the petals and the other parts of the flower. The corolla consists of one petal,

with five equal divisions, which adhere to the tube of the calyx, as if glued to it. A species of passion-flower, termed by Linnæus *passiflora suberosa*, wants the petals. The stamina are in number from one to five, short, and generally inserted into the calyx. The filaments are distinct; the antheræ of many genera are united in a cylinder. In the passion-flower they are slightly attached to the filaments, on which they turn like a vane or the needle of a compass. The seed-bud is single, and placed below the receptacle of the flower. The style is generally single, cylindrical, of the length of the calyx, and crowned with a triple stigma. The seed-vessel is generally pulpy, of the apple or berry kind, and consists of one, two, or three cells. The seeds are numerous, generally flat or compressed, and sometimes covered with that kind of proper coat called by Linnæus *arillus*.—The fruit of these plants is generally purgative and refreshing; that of some of them prove a very violent emetic when used too freely.

35. *Senticosæ*, (from *sentis* a briar or bramble); consisting of the rose, bramble, and other plants which resemble them in port and external structure. These plants are so nearly allied in form, habit, and structure, to those of the natural order *Pomaceæ*, that they ought never to have been separated from it. The leaves have a styptic taste; the fruits are acid and cooling. With respect to their virtues, the leaves are vulnerary and astringent, the roots are diuretic. The acid fruits, as strawberry and raspberry, are used with success in putrid and bilious fevers, as likewise in contagious and epidemic dysenteries, which prevail in summer and autumn, and are occasioned by a sudden transition from a hot to a cold air, or by the acrid humour which flows into the intestines.

36. *Pomaceæ*, (from *pomum* an apple); consisting of those which have a pulpy esculent fruit, of the apple, berry, or cherry kind. The plants of this order, which furnish many of our most esteemed fruits, are mostly of the shrub and tree kind. The roots are branched, fibrous, and in the greater part very long. The stems and branches are cylindric. These last are placed alternate; and, when young, are, in some genera, angular. The bark is thick and wrinkled. The buds are of a conic form, placed in the angles of the leaves, and covered with scales which lie over each other like tiles. The leaves, which differ in form, being in some genera simple, in others winged, are, in the greater number, placed alternate. The footstalk of the leaves is furrowed above, and frequently accompanied by a number of knobs like glands. Most of these plants are furnished with two stipulæ at the origin of the young footstalks of the leaves. These, in some genera, are pretty large: in others, they are so small as scarce to be perceived; and in cocoa-plumb, in particular, they by their minuteness resemble hairs. The flowers are universally hermaphrodite, except in *spiræa aruncus*, in which male and female flowers are produced on distinct plants. In the greater number of genera they are produced in clusters or heads at the end of the branches. The calyx is of one piece, with five segments or divisions, which are permanent, and placed above the seed-bud in some; in the rest, they either fall off with the flower, or wither upon the stalk. The petals are five in number, and are inserted into the tube of the calyx. The stamina are generally 20 and upwards, and attached like the petals

to the margin of the tube of the calyx. The antheræ are short, and slightly attached to the filaments. The seed-bud is single; and in those genera which have the calyx permanent, it is placed below the receptacle of the flower. The seed-vessel is a pulpy fruit of the apple, berry, or cherry kind. Those of the apple kind are divided internally into a number of cavities or cells. The seeds are numerous.—The pulpy fruits of this order are acid, esculent, and of great efficacy in putrid and bilious fevers.

37. *Columniferae*, (from *columna* a pillar, and *fero* to bear); consisting of plants whose stamina and pistil have the appearance of a column or pillar in the centre of the flower. This order furnishes a choice collection of herbs both annual and perennial, shrubs, and trees. These are very different in size and height, from the creeping mallows, and low shrubby tea tree, to the fleshy limes, and the more lofty silk-cotton-trees, which by some modern writers are affirmed to be so large as not to be fathomed by 16 men, and so tall that an arrow cannot reach their top. The shrubs and trees of this order are deciduous, pretty thick, of a beautiful appearance, with an erect stem, which is formed by its branches and foliage into a round head. The roots are extremely long, branch but little, and either run perpendicularly downwards, or extend themselves horizontally below the surface. The stems are cylindric. The young branches, though commonly of the same figure, are sometimes angular. The bark is thick and pliant. The wood, in general, very soft and light. The buds are of a conic form, naked, or without scales; and situated either at the extremity of the branches, or in the angle formed by the branch and leaf. The leaves are alternate, simple, divided into several lobes, and frequently hand or finger shaped. The ribs or nerves on the back of the leaf, in some genera of this order, are provided near their origin with a number of hollow furrows or glands, which, being filled with a clammy honey-like liquor, have been considered as so many vessels of secretion. The footstalk of the leaves is cylindric, swelled at its origin, and appears jointed at its junction with the branch. The flowers are universally hermaphrodite, except in *biggeleriæ*, and a species of Virginian marshmallow, called by Linnæus *napæa dioica*; the former of which bears male and female, the latter male and hermaphrodite, flowers on different roots. In many plants of this order, the flowers generally open about nine in the morning, and remain expanded till one in the afternoon. The flowers either terminate the branches, proceed from the angles of the leaves, or are disposed either singly or in a corymbus along the branches or stem. In most of these genera the calyx is single, but in others frequently double. In these last the inner calyx is always of one piece, generally divided into five segments; the outer consists either of one leaf, of three distinct leaves, or of many. The calyx, when single, is sometimes composed of one leaf which is permanent, or of several distinct leaves which are generally coloured, and fall off with the petals. In plants that have a double calyx, both flower-cups are generally permanent. The petals in this order are from four to nine; five is the prevailing number. The stamina, which are in number from 5 to 20 and upwards, are generally inserted into the common receptacle of the calyx, or into the pistillum or seed-bud. The filaments are either distinct,

finet, or united in a cylinder, which, proceeding from the receptacle of the calyx, surrounds the seed-bud, and attaches itself to the base of the petals, with which it slightly unites. The antheræ are frequently roundish, and placed erect on the filament; most commonly, however, they are oblong or kidney-shaped, and slightly attached by the middle, or sides, to the filaments, on which they turn like a vane or needle. This last is particularly the characteristic of all the mallow tribe. The seed-bud is generally roundish or conic; and sometimes, as in the tea-tree, angular. The seed-vessel is generally a capsule; sometimes a pulpy fruit of the berry or cherry kind. In some, it is a woody or membranous capsule, divided into as many cells internally as there were partitions in the seed-bud. The seeds are generally solitary, sometimes angular, and sometimes kidney-shaped.—These plants are mucilaginous and lubricating.

38. *Tricoccea* (from *tricus* three, and *kokkos* a grain); consisting of plants with a single three-cornered capsule, having three cells or internal divisions, each containing a single seed. The single seed-vessel of these plants is of a singular form, and resembles three capsules, which adhere to one common footstalk as a centre, but are divided externally into three pretty deep partitions. This family is not completely natural. It must be observed, however, that the character expressed in the title is a striking one; and that though the plants which possess it are not connected by such numerous relations as to form a true natural assemblage, yet they are by that circumstance distinguished from all other plants with as great, nay greater facility, than by any artificial character yet known. But all the genera of this order have not the striking character just mentioned.

39. *Siliquosa*, (from *siliqua* a pod); consisting of plants which have a pod for their seed-vessel. This order chiefly furnishes biennial and perennial herbs of an irregular figure. The roots are long, branched, crooked, and fibrous. In some they are succulent and fleshy, in others jointed. The stems and young branches are cylindric. The leaves, which differ in point of form, being sometimes simple, sometimes winged, are generally placed alternate. The flowers are hermaphrodite, and in the greater number disposed in a spike at the extremity of the branches. The flower-cup is composed of four leaves, which are oblong, hollow, blunt, bunched at the base, and fall with the flower. These leaves are sometimes erect, and sometimes spread horizontally. The petals, which are four in number, spread at top, and are disposed like a cross: the claws or lower part of the petals are erect, flat, awl-shaped, and somewhat longer than the calyx. The upper part widens outwards. The stamina are six in number; two of which are of the length of the calyx, and the remaining four somewhat longer, but shorter than the petals. The antheræ are of an oblong figure, pointed, thicker at the base, and erect. Betwixt the stamina, in plants of this order, are generally lodged one, two, or four, round greenish knots, which in some genera are so small as to elude the sight. These glands, called by Linnæus *glandula nectarifera*, and used very improperly by that author as an essential character in discriminating the genera, seem to be prominences of the receptacle of the flower, occasioned

by the stamina being deeply lodged in its substance. The seed-bud is single, and stands upon the receptacle of the flower. The style, which is either cylindric or flat like a scale, is of the length of the four longer stamina in some genera: in others it is very short, or even wanting. It accompanies the seed-bud to its maturity. The stigma is blunt, and sometimes deeply divided into two parts. The seed-vessel is either a long pod, or a short and round one. Either sort has two valves or external openings, and in a great many genera the same number of internal cavities or cells, the partition of which projects at the top beyond the valves. The seeds are roundish, small, and attached alternately by a slender thread to both futures or joinings of the valves. These plants have a watery, sharp, lixivial taste; and are charged with a fixed alkaline salt, which is drawn from them by burning, and being distilled without any addition produces a volatile alkali. Most of them have a stinking smell. With respect to their virtues, they are diuretic, attenuating, deterfive, and antiscorbutic. These qualities, however, are most eminently possessed by the live plants; when dried, they either entirely disappear, or are greatly diminished. Applied externally, these plants are useful in diseases of the skin, as the itch, leprosy, &c.

40. *Personata*, (from *persona*, a masque); consisting of a number of plants whose flowers are furnished with an irregular, gaping, or grinning petal, in figure somewhat resembling the snout of an animal. This order furnishes both herbaceous and woody vegetables of the shrub and tree kind. The roots are generally fibrous and branched. The stems and branches are cylindric when young, except in some species of figwort, in which they are square. The leaves are simple, generally placed opposite in pairs at the bottom of the branches, but in many genera stand alternate towards the top. The flowers are universally hermaphrodite; they proceed either singly or in clusters from the wings of the leaves, or terminate the branches in a spike, panicle, or head. The calyx is of one leaf, which is cut into two, three, four, or five segments, or divisions, that are permanent. The corolla is composed of one irregular petal, with two lips, resembling, as was already observed, the head or snout of an animal. In some plants the stamina are two or four in number, and of an equal length; in others they are universally four in number, two of which are long and two short. The seed-bud is single, and placed above the receptacle of the flower. The style is single; thread-shaped; bent in the direction of the stamina: and crowned with a stigma, which is generally blunt, and sometimes divided into two. The seed-vessel is a capsule, generally divided internally into two cavities or cells, and externally into the same number of valves or inclosures. The seeds are numerous, and affixed to a receptacle in the middle of the capsule.—These plants possess nearly the same qualities with the lip-flowers, though in a less degree. With respect to their virtues, many of them are aperient, anodyne, purgative, and even emetic. The internal use of many of them is extremely pernicious; applied externally, they are anodyne, and powerful resolvents.

41. *Asperifolia*, rough-leaved plants. The greatest part of these are herbaceous and perennial. The roots are branching and fibrous; the stems and branches rounded;

rounded; the buds of a conic form, naked or without scales. The leaves are simple, alternate, commonly very rough to the touch, and in most of the herbaceous plants sessile or attached to the stem and branches without any foot-stalk. In the few trees, however, of this order, the leaves have a foot-stalk, the lower part of which, after the fall of the leaves, remains like a spine or thorn. The hairs are simple, and generally very rough to the touch. The flowers are in some genera solitary; but commonly collected into a spike or corymbus. They do not proceed from the angle formed by the stem or branch with the leaf, as in many plants; but from the side of the leaf, or from that part of the stem which is opposite to the leaf. They are almost universally hermaphrodite: in a few species of *cordia*, male and female flowers are produced upon different roots. The calyx is composed of one leaf, which is divided from three to ten equal or unequal parts. Those with four naked seeds have the calyx deeply divided into five parts which are permanent. The corolla is monopetalous, or composed of one petal, which in different plants is bell, funnel, salver, and wheel-shaped. The divisions of the limb or upper part of the petal are generally five, alternate with those of the calyx; equal and regular, except in *echium*. The stamina are five in number, alternate with the divisions of the corolla. They are equal, attached to the tube of the corolla a little above its origin, and of the same height. The antheræ are in some genera connivent; that is, approach and form a compact body above the filaments. The pistillum is generally composed of a slender style of the same length with the stamina, and crowned with a simple stigma. It proceeds from a germen or seed-bud, which in some plants is undivided, but generally split into four. The seeds are generally four in number, and lodged in the bottom of the calyx.—Most of the rough-leaved plants are used in medicine: the flowers are esteemed cordial, the leaves and roots vulnerary and astringent; and the hard bony seeds are reckoned powerful promoters of urine. Externally, these plants are used for burnings and poisonous bites; they extirpate warts, and relieve disorders of the loins.

42. *Verticillate*, consisting of herbaceous vegetables, having four naked seeds, and the flowers placed in whorls round the stalk. The roots are branched and fibrous. The stems are round when old, but square when young; as are likewise the young branches, which stand opposite. The leaves are opposite, and in the greater number covered with transparent points. Those which are placed next the flower generally differ from the stem-leaves. In the greater number of plants of this kind, the leaves are supported upon a long cylindrical foot-stalk that is furrowed above. The flowers are universally hermaphrodite, except in a species of thyme mentioned by Mr Adanson, which appears to have male or barren flowers on one root, and female or fertile flowers on the other. They are disposed round the stem in whorls or small heads with short foot-stalks. The calyx is of one piece, that is generally cut into five unequal divisions, whose disposition sometimes represents two lips; the uppermost of which has commonly a less number of divisions: it accompanies the seeds, which it nourishes in its bosom, to their maturity. The petal is of the gaping or lip kind, and in the different ge-

nera is more or less irregular or unequal, either in its tube, or in the divisions of the lips; the number of which varies from two to five. These divisions frequently form two lips; of which the uppermost, termed the *crest* and the *helmet*, is sometimes entire, sometimes more or less deeply cut into two; the lowermost, termed the *beard*, generally into three. The stamina are two or four in number. In the greater part there are four stamina of unequal length, two of them being long and two short. These four unequal stamina are frequently dissimilar, and approach by pairs: they are inclined towards the back of the petal, and parallel: the two innermost being shortest, and attached somewhat lower than the two others to the tube of the flower. The seed-bud, which consists of four distinct ovaries, is placed upon the seat of the flower, and elevates from their centre a common style, which is slender, bent in the same manner as the filaments, which it somewhat exceeds in length, and terminated by a double stigma or summit, the divisions of which are unequal, and turned backwards. The seed-vessel in this order is wanting. The seeds are four in number, and lodged in the bottom of the calyx as in a matrix or seed-vessel. Each seed has two covers; the one external, of a cartilaginous or leathery substance; the other internal, membranaceous, of a very fine texture, and placed immediately above the radicle or embryo plant.—The plants of this order are fragrant, warm, penetrating, and accounted cordial and cephalic. Their chief virtue resides in the leaves.

43. *Dumosa*, (from *dumus* a bush); consisting of a number of shrubby plants, which are thick set with irregular branches, and bushy. The plants of this order are all of the shrub and tree kind, thick and bushy, rising from 6 to 25, 30, and even 40 feet high. Many of them too, as bastard alaternus, holly, iron-wood, New-Jersey-tea, star-apple, viburnum, winter-berry, and some others, retain their beautiful leaves during the whole year. The roots are branched and fibrous. The stems are cylindric; the young branches sometimes angular. The buds are naked, that is, without scales, in the evergreen shrubs of this order; covered with scales in most of the others. The leaves, which in some genera are simple, in others compound, are placed alternate in some, and opposite in others. The flowers are mostly hermaphrodite. They proceed from the wings of the leaves either singly or in clusters; or they terminate the stem in that sort of flowering head called a *corymbus*. The calyx is generally very small, placed below or around the seed-bud; and consists of one leaf, with four, five, or six divisions, which are permanent. The *ramnus* has no calyx. The petals are in number from one to five. The stamina are either four, five, six, or ten. The seed-bud is generally roundish, and placed within the flower. The style is commonly single, and sometimes wanting. The stigma, is either single or triple. The seed-vessel is generally a berry, sometimes a dry capsule; the seeds are generally single and egg-shaped. The berries, bark, and flowers of many of these plants are purgative, and act particularly on the lymph and bile.

44. *Sepiaria*, (from *sepes* a hedge); consisting of a beautiful collection of woody plants, some of which, from their size, elegance, and other circumstances, are very proper furniture for hedges. This order furnishes

woody plants both of the shrub and tree kind, most of which do not drop their leaves till nearly the time when the new leaves begin to appear.

45. *Umbellate*, (from *umbella* an umbel); consisting of plants whose flowers grow in umbels, with five petals that are often unequal, and two naked seeds that are joined at top and separated below. These plants are herbaceous, and chiefly perennial. The roots are either tuberous or spindle-shaped, and sometimes forked. The stems are cylindric, full of pitch, and frequently hollow. The branches are alternate. The leaves, which like the branches are put on alternately, are very different in point of form; being simple and entire in some; target-shaped, in a species of navel-wort; finger or hand-shaped, in some others; and winged or pinnated with numerous minute divisions, as in the greater number. They are supported by a foot-stalk, which is very broad and membranous at its origin, and commonly embraces the whole contour of the stem and branches. The flowers are in general hermaphrodite. There are, however, some that have male or barren flowers in the same umbel. This is particularly the case with those umbelliferous plants which have the petals in the flowers of the circumference large and unequal. In these plants the flowers in the circumference only prove fertile; those in the centre, or disk, proving abortive. *Oenanthe* and *imperatoria*, on the contrary, have the flowers in the circumference abortive. In ginseng, hermaphrodite and male flowers are produced upon distinct plants. The flowers are disposed in an umbel, which is either simple or compound. The common calyx in this order is that sort termed very improperly by Linnæus *involucrum*, or the flower-cover; which in the greater number consists of one or more leaves placed under the partial or universal umbel, or both, for the purpose of support. The presence or absence of one or both of these covers affords excellent marks in discriminating the genera of this very similar order of plants. The proper calyx of each flower, in the aggregate, consists of five minute indentments placed upon the seed-bud, which it envelopes, and accompanies to its maturity. The petals are five in number, and disposed upon the sides of the flower-cup in form of a rose. In the florets of the centre, the petals are generally pretty equal and small; in those of the circumference, they are frequently unequal and larger; in the greater number, they are heart-shaped, and cut almost to the middle in two. The stamina are five in number, placed opposite to the divisions of the flower-cup, and alternate with the petals. The seed bud is universally placed under the seat of the flower, and supports two styles which are turned backwards, and crowned with simple summits which do not differ in appearance from the styles. The seed-vessel in this order is wanting. The seeds are two in number, which, when ripe, separate below, but remain closely attached at top. The plants of this order, which grow in dry places, are sudorific, stomachic, and warming. Their virtue resides chiefly in the seeds and leaves. Those which grow in marshy places are generally poisonous; but, notwithstanding the extremely warm and even caustic quality of most of these plants, many of them are employed in the kitchen, and in the œconomy of domestic affairs.

46. *Hederacea*, (from *hedera* ivy); consisting of ivy

and a few other genera that seem nearly allied to it. This order furnishes both herbaceous and shrubby plants; most of which, particularly ivy and vine, have creeping branches, which attach themselves by roots or tendrils to the bodies in their neighbourhood. The roots are long, with few branches. The stems and young branches are cylindric. In some species of vine they are square. The leaves are alternate; sometimes simple, sometimes winged, in which the surface of the leaves is covered with points. The foot-stalk of the leaves is cylindrical, and without any furrow. The buds are of a conic form, and without any scales. The flowers are either hermaphrodite, male and female upon different roots, or hermaphrodite and male upon different roots. In some, they terminate the branches in an umbel; in others they proceed in clusters from the side opposite to the leaves; and in some, they are produced along the branches. The calyx consists of one leaf divided into five parts, which are small and generally permanent. The petals in this order are generally five. The stamina are in number five; awl-shaped, erect, and generally of the length of the petals. *Cissus* has only four stamina, which are inserted into the nectarium, a sort of border surrounding the seed-bud. The antheræ are roundish, and sometimes, as in ivy, attached to the filaments by the sides. The seed-bud is sometimes round, sometimes shaped like a top or pear, and ends in one, two, or five awl-shaped styles, which are crowned with a simple stigma. The flowers of the vine have no style. The seed-vessel is of the berry kind, with one, two, or five styles. The seeds are from one to five in number; placed either in distinct cells, or dispersed through the pulp without any partition.

47. *Stellate*, (from *stella* a star); consisting of plants with two naked seeds, and leaves disposed round the stem in form of a radiant star. This order contains herbs, shrubs, and trees. The herbs, which are most numerous, are chiefly annual, and creep along the surface of the ground. The shrubs and trees are mostly evergreens, which rise erect, and are of an agreeable conic form.—These plants are opening; some of their seeds, particularly those of coffee, are bitter and cordial; some of them are used in dyeing, and others in medicine.

48. *Aggregate*, (from *aggregare*, to assemble or collect); comprehending those plants which have aggregate flowers, consisting of a number of florets or small flowers, each of which have a proper and common calyx.

49. *Composita*, consisting of plants with compound flowers. In this order Linnæus has constructed his first or primary divisions from the different sexes of the florets, which he terms *polygamy*; the subaltern divisions are constructed from the figure of the petals, the disposition of the flowers, the pappus or crown of the seed, the common receptacle, and other circumstances which characterize the subaltern divisions in other authors.

50. *Amentacea*, (from *amentum* a catkin), plants bearing catkins; as *salix*, *populus*, *platanus*, &c.

51. *Conifera*, (from *conus* a cone, and *fero* to bear); consisting of plants, whose female flowers, placed at a distance from the male, either on the same or distinct roots, are formed into a cone. In this character, the only

only one expressed in the title, the plants in question seem to be nearly allied to the family of mosses: from which, however, they are easily distinguished by their habit, as well as by the structure of the small flowers, in which the stamina are united below into a cylinder, and distinct at top. The plants of this order are mostly of the shrub and tree kind, and retain their leaves all the year. The form of these plants is generally conic, and extremely beautiful, from the disposition of the branches, which cover the stems even to the roots, extending themselves horizontally and circularly like so many rays. The height of some genera of this order does not exceed half a foot, that of others approaches to a hundred. The roots are short branching, not very fibrous, and extend horizontally. The stems and branches are cylindric. The bark is thin, and split into slender scales. The wood, except that of the yew-tree, possesses little hardness. The buds are of a conic form, and naked, or without scales. The leaves are entire, small, and thick, frequently triangular, and generally pointed. Juniper has a prickly and thorny leaf. With respect to situation, they admit of great variety, being either alternate, opposite, placed in whorls round the stem, or collected into small bundles which proceed from a single point. They are placed on the branches without any sensible footstalk. The flowers in this order are universally male and female. In some genera, the male flowers are collected into a spike or cone at the end of the branches; in others, they proceed singly from the wings of the leaves, or termination of the branches. The female flowers are generally collected into a cone; but in yew-tree and shrubby horse-tail they are single, and terminate the branches. The calyx of the male flowers is a catkin; of the female, a cone. The petals of this order are wanting; except in the female flowers of juniper, which have three sharp rigid, and permanent petals. The stamina are in number from 3 to 20 and upwards; united by their filaments into a cylinder or pillar, which rises out of the centre of the calyx. The antheræ are erect, distinct, of a roundish form, and divided into internal partitions or cells, which, in the different genera, are in number from two to ten. The seed-buds are generally numerous, and placed betwixt the scales of the cone, which serve for a calyx. From each seed-bud arises a very short cylindrical style, crowned with a simple stigma, of a conic form. These plants have probably no seed-vessel or fruit; the seeds being naked, and involved only by the scales of the calyx. In some genera, these scales are of a bony nature, and almost united; in others, they are of a substance like leather; in juniper, they are united, and become fleshy and succulent like a berry. The seeds in this order, being nourished, as in a seed-vessel, by the scales of the cone, or common calyx, differ in nothing from the germina or seed-buds.—Most of the cone-bearing plants are resinous, or gummy; and the gums proceeding from them have a bitter taste, but generally a very agreeable smell.

53. *Coadunata*, (from *coadunare*, to join or gather together); so termed from the general appearance of the seed-vessels, which are numerous, and being slightly attached below, form all together a single fruit in the shape of a sphere or cone; the parts of which, however, are easily separated from one another. This order, which consists of exotic plants, furnishes a beautiful and choice

collection of shrubs and trees, both evergreen and deciduous. The trees are often 60 feet high, and garnished from the bottom to the top with spreading branches and leaves of a bright green colour, which assume a very agreeable conic form. The roots are branching and fibrous. The stems are cylindric, and the wood very hard. The buds are conic, flat, and generally without scales. The leaves are universally simple and alternate. The footstalk is cylindric, without furrows, frequently swelled at its origin, and appears jointed at its insertion into the branch. The flowers are hermaphrodite, and are generally produced either along or at the end of the branches. The calyx generally consists of three oblong plain leaves, like petals, which fall off with the flower. The petals are in number from 6 to 18, oblong, concave, and frequently disposed in two or three series or rows, the outermost of which are largest. The stamina are numerous, short, and inserted into the common receptacle in some, and into the seed-bud in others. The filaments are very short and slender, some genera having scarce any at all. The antheræ are numerous, slender, and placed round the seed-bud. The pistillum generally consists of a number of seed-buds disposed in the form of a cone, and seated upon a receptacle which rises like a small pillar above the receptacle of the calyx. From each seed-bud generally arises a cylindric style, which is very short. The stigma is commonly blunt. The seed-vessel is commonly a berry; but in magnolia it is an oval cone, consisting of a number of roundish capsules laid over each other like tiles. The fruits or seed-vessels, whether of the berry, capsule, or cherry kind, are equal in number to the seed-buds, and generally slightly attached below. The seeds are numerous, hard, roundish, and sometimes cornered. The plants of this order have a strong, agreeable, and aromatic smell; the fruits and seeds have a pungent taste like pepper: the bark and wood are bitter.

53. *Scabridæ*, (from *scaber* rough, rugged, or bristly); consisting of plants with rough leaves. There seems to be some impropriety in characterizing these plants by a name expressive of the roughness of their leaves, as that circumstance had previously furnished the classic character of the *Asperifoliæ*. The degree of roughness, however, is much greater in the plants which make the subject of the present article.—The plants of this order are in general of an astringent nature; their taste is bitter and styptic.

54. *Miscellanæ*, miscellaneous plants. This order consists of such genera as are not connected together by very numerous relations. They are, datisca, potetrium, reseda, sanguisorba, lemna, pistia, coriaria, empetrum, achyranthes, amaranthus, celosia, gomphrena, iresine, phytolacca, nymphæa, sarracenia, cedrela, swietenia, corrigiola, limeum, telephium.

55. *Filices*, ferns; consisting of plants which bear their flower and fruit on the back of the leaf or stalk. These plants, in figure, approach the more perfect vegetables; being furnished, like them, with roots and leaves. The roots creep, and extend themselves horizontally under the earth, throwing out a number of very slender fibres on all sides. The stem is not to be distinguished from the common footstalk, or rather middle rib of the leaves: so that in strict propriety the greater number of ferns may be said to be *acaules*: that

is, to want the stem altogether. In some of them, however, the middle rib, or a stalk proceeding from the root, overtops the leaves, and forms a stem upon which the flowers are supported. The leaves proceed either singly, or in greater numbers, from the extremities of the branches of the main root. They are winged or hand-shaped in all the genera except in adders-tongue, pepper-grass, and some species of spleen-wort. The flowers, whatever be their nature, are, in the greater number of genera, fastened, and as it were glued, to the back of the leaves; in others, they are supported upon a stem which rises above the leaves; but in some, are supported on a flower-stalk, as already mentioned. The stamina are placed apart from the seed-bud in a genus termed by Mr Adanson *palma filix*; in the other ferns, where we have been able to discover the stamina, they are found within the same covers with the seed-bud. Most of the ferns have a heavy disagreeable smell: as to their virtues, they are opening and attenuating.

56. *Musci*, mosses. These plants resemble the pines, firs, and other evergreens of that class, in the form and disposition of their leaves, and manner of growth of the female flowers, which are generally formed into a cone. They frequently creep, and extend themselves like a carpet upon the ground, trees, and stones, being generally collected into bunches and tufts: the smallest are only one third of an inch in height, and the largest do not exceed five or six. Few of the mosses are annual: small as they are, the greater number are perennial and evergreens. Their growth is remarkably slow, as may be judged by the time that the antheræ take to ripen. This, reckoning from the first appearance of the antheræ to the dispersion of its powder or male dust, is generally four or six months. Although preserved dry for several years, these plants have the singular property of resuming their original verdure upon being moistened. It would be worth while to determine whether they do not also resume their vegetative quality. The roots of plants of this order are fibrous, slender, branched, and short. The stems are cylindric and weak, as are also the branches; they creep upon the ground, and strike root on every side. The leaves are very small and undivided. They differ with respect to situation; being either alternate, opposite, or placed by fours round the stalk. They have no perceptible footstalk nor middle rib, and are seated immediately upon the stem. The flowers are universally male and female: in some, the male flowers are produced upon the same plants with the female, and stand before them; in others, they are produced sometimes on the same, and sometimes on distinct plants. The male flowers consist entirely of antheræ, and their covering: proceed either singly, or in clusters, from the extremity of the branches, or angles of the leaves; and are either seated immediately upon the branches, or supported by a long footstalk. The female flowers, which generally resemble capsules or cones, are all placed immediately upon the stem or branches, without any footstalk; and proceed singly either from the wings of the leaves, or summit of the

branches; when produced upon the same plant with the male they are always placed under them. The female cones of the mosses greatly resemble those of the pines and evergreen trees of that class; the scales which form them are true leaves, each containing in its wing or angle a single seed. When the seeds are ripe, the cones probably open for their dispersion. When shut, they resemble buds, and have sometimes been ignorantly mistaken for such. The calyx, in this order, if it can be called such, is that appearance resembling a veil or monk's cawl, which in the male flower covers or is suspended over the tops of the stamina like an extinguisher, and is termed by Linnæus *calyptra*. The petals are universally wanting. The mosses in general are almost tasteless, have few juices, and being once dried do not readily imbibe moisture from the air. Those which grow in water, being thrown into the fire, grow red, and are reduced to ashes without receiving or communicating any flame; on which account some superstitious people, the Siberians in particular, place water moss in their chimnies as a preservative against fire. Most of the mosses are purgative; some violently so, and even emetic. They are all of wonderful efficacy in preserving dry such bodies as are susceptible of moisture; and in retaining, for a long time, the humidity of young plants without exposing them to putrefaction. For this reason, such plants as are to be sent to any considerable distance, are generally wrapped up in them.

57. *Alga*, flags; consisting of plants whose root, leaf, and stem, are all one. Under this description are comprehended all the sea-weeds, and some other aquatic plants.

58. *Fungi*, mushrooms. These plants are rarely branched, sometimes creeping, but most commonly erect. Such as are furnished with branches have them of a light spongy substance like cork. Mushrooms differ from the fuci, in that those which, like the fuci, have their seeds contained in capsules, are not branched, as that numerous class of sea-weeds are. The greatest part of mushrooms have no root: some, instead of roots, have a number of fibres, which, by their infusulations, frequently form a net with unequal meshes, some of which produce plants similar to their parent vegetable. The stamina in these plants are still undetermined. The seeds are spread over the surface of the plant, or placed in open holes or cavities, resembling the open capsules of some of the fuci. In mushrooms which are branched, the seeds are frequently visible by the naked eye, and always to be distinctly observed by the assistance of a good microscope. These plants are very astringent, and some of them are used for stopping violent hæmorrhages. As a vegetable food, they are at best suspicious: some of them are rank poison.

Dubii ordinis. Under this name Linnæus classes all the other genera which cannot be reduced to any of the abovementioned orders, and which are near 120 in number.

ALPHABETICAL INDEX of BOTANICAL TERMS.

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Botany

Botargo.

BOTANY-BAY. See *New HOLLAND*.

BOTANOMANCY, (from *Botan*, herb, and *μαντια*, divination), an ancient species of divination, by means of plants; especially sage and fig leaves. The manner of performing it was thus: the persons who consulted wrote their own names and their questions on leaves, which they exposed to the wind; and as many of the letters as remained in their own places were taken up, and being joined together, contained an answer to the question.

BOTARGO, a kind of sausage, made with the eggs and blood of the mullet, a large fish common in the Mediterranean. The best kind comes from Tunis in Barbary: It must be chosen dry and reddish. The people of Provence use a great deal of it, the common way of eating it being with olive oil and lemon juice.

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There is also a great consumption of it throughout the Levant.

BOTE, (Sax.), signifies a recompence, satisfaction, or amends: hence comes *manbote*, compensation or amends for a man slain, &c. In king Ina's laws is declared what rate was ordained for expiation of this offence, according to the quality of the person slain. From hence likewise we have our common phrase, *to-boot*, i. e. *compensationis gratia*. There are *house-bote*, *plough-bote*, &c. privileges to tenants in cutting of wood, &c.

BOTELESS, (*sine remedio*). In the charter of Hen. I. to Tho. archbishop of York, it is said, "that no judgment, or sum of money, shall acquit him that commit sacrilege; but he is in English called *boteless*, viz. without emendation." We retain the word still in

3 O

common

Bote
Boteless.

Both
Botticelli

common speech: as, It is *bottleless* to attempt such a thing; that is, It is in vain to attempt it.

BOTH (John and Andrew), Flemish painters, and pupils of Bloemart. The union of these brothers was very singular; they were inseparable in their studies, travels, and paintings. John painted the landscape part of their pictures in the manner of Lorrain, and Andrew the figures and animals in the style of Bamboche. They both died in 1650. John's taste in landscape is elegant; his ideas are grand; his composition beautiful; and his execution rich and masterly in the highest degree. His light is not always well distributed; but his figures are excellent. It is to be regretted that we have not more of his works; for they are certainly, upon the whole, among the best landscapes we have.

BOTHNIA, a province of Sweden, at the end of the gulph of the same name. It is divided into two parts called *east* and *west Bothnia*, the former of which belongs to Finland. West Bothnia is full of mountains; the earth is sandy, and yet a scarcity of provisions is seldom known. Cattle and game are so common, salmon and a sort of herrings so plenty, and the trade of skins is so gainful, that the inhabitants can command what they want from their neighbours. There are only two towns worth mentioning, *viz.* Tornea and Uma. The inhabitants of this province are Protestants; and are a civil well-behaved people.

BOTRYS, **BOTRUS**, or *Boftra*, (anc. geog.) a town of Phoenicia, on the Mediterranean, built by Saturn, (a proof at least of antiquity); twelve miles to the north of Byblus, and twenty to the south of Tripolis. Now almost in ruins, and called *Boteron*, or *Boturn*, (Pestellus). E. Long. 37. 30. N. Lat. 34. 6.

BOTT, among bone-lace weavers, a kind of round cushion of light matter placed on the knee, whereon they work or weave their lace with bobbins, &c.

BOTT, in zoology. See **BOTTS**.

BOTTICELLI, (Sandro, or Alessandro), born at Florence in 1437, learned the rudiments of painting under Filippo Lippi. He executed several pictures for pope Sixtus IV. and others for the city of Florence: for these he received large sums of money, all of which he expended, and died at last in great distress, aged 78. He was not only a painter, but a man of letters. Baldini, according to the general report, communicated to him the secret of engraving, then newly discovered by Finiguerra their townsman. The famous edition of Dante's Poem of Hell, printed at Florence by Nicholo Lorenzo della Magna, A. D. 1481, and to which, according to some authors, Botticelli undertook to write notes, was evidently intended to have been ornamented with prints, one for each canto; and these prints (as many of them as were finished) were designed, if not engraved, by Botticelli. It is remarkable, that the two first plates only were printed upon the leaves of the book, and for want of a blank space at the head of the first canto, the plate belonging to it is placed at the bottom of the page. Blank spaces are left for all the rest; that as many of them as were finished might be pasted on. Mr Wilbraham possesses the finest copy of this book extant in any private library; and the number of prints in it amounts to nineteen. The two first, as usual, are printed on the leaves; and the other seventeen, which follow regularly, are pasted on the plank spaces. And these ap-

parently were all that Botticelli ever executed. About the year 1460, it is said that he engraved a set of plates, representing the *Prophets and Sibyls*. Bafan tells us that he marked these plates with a monogram composed of an A and a B joined together.

BOTTLE, a small vessel proper to contain liquors, made of leather, glass, or stone. The word is formed from *butellus*, or *botellus*, used in barbarous Latin writers, for a lesser vessel of wine; being a diminutive of *bota*, which denoted a butt or cask of that liquor.

The ancient Jewish bottles were cags made of goats or other wild beasts skins, with the hair on the inside, well sewed and pitched together; an aperture in one of the animal's paws serving for the mouth of the vessel.

Glass-bottles are better for cyder than those of stone. Foul glass-bottles are cured by rolling sand or small shot in them; musty bottles, by boiling them. See **GLASS**.

Bottles are chiefly made of thick coarse glass: though there are likewise bottles of boiled leather made and sold by the case-makers. Fine glass-bottles covered with straw or wicker, are called *flasks* or *bettees*. The quality of the glass has been sometimes found to affect the liquor in the bottle.

Dr Percival cautions against the practice of cleaning of wine bottles with leaden shot. It frequently happens (he thinks), through inattention, that some of the little pellets are left behind; and when wine or beer is again poured into the bottles, this mineral poison will slowly dissolve, and impregnate those vinous liquors with its deleterious qualities. The sweetness which is sometimes perceived in red port wine may arise from this cause, when such an adulteration is neither designed nor suspected.—Potash is recommended for cleaning bottles: a small quantity in the water will clean two gross.

BOTTLING, the operation of putting up liquors in bottles corked, to keep, ripen, and improve. The writers on good husbandry give divers rules concerning the bottling of beer, cyder, and the like. The virtues of Spaw, Pyrmount, Scarborough, and other waters, depend on their being well bottled and corked, otherwise they lose both their taste and smell. To preserve them, it is necessary the bottles be filled up to the mouth, that all the air may be excluded, which is the great enemy of bottled liquors. The cork is also further secured by a cement. Some improve their bottled beer, by putting crystals of tartar and wine, or malt spirits; and others, by putting sugar boiled up with the essence of some herb, and cloves, into each bottle.

Cyder requires special precautions in the bottling; being more apt to fly, and burst the bottle, than other liquors. The best way to secure them, is to have the liquor thoroughly fine before it be bottled. For want of this, some leave the bottles open a while, or open them after two or three days bottling to give them vent. If one bottle break, through fermentation, it is best to give them all vent, and cork them up again. Mean cyder is apter to break the bottles than rich. Some soak the corks in scalding water, to render them more pliant and serviceable. Another particular to be observed is, to lay the bottles so as that liquor may always keep the cork wet and swelled. Something also depends on the place where the bottles are set, which ought

Bottle
Bottling.

Bottom ought to be such as exposes them as little as possible to the alterations and impressions of the air: the ground is better for this purpose than a frame; sand better than the bare ground, and a running water, or a spring often changed, best of all.

To hasten the ripening of bottled liquors, they are sometimes set in a warm place, or even exposed to the sun, when a few days will bring them to maturity.

BOTTOM, in a general sense, denotes the lowest part of a thing, in contradistinction to the top or uppermost part.

BOTTOM, in navigation, is used to denote as well the channel of rivers and harbours, as the body or hull of a ship. Thus, in the former sense, we say, a *gravelly bottom*, *clayey bottom*, *sandy bottom*, &c. and in the latter sense, a *British bottom*, a *Dutch bottom*, &c.—By statute, certain commodities imported in foreign bottoms pay a duty called *petty customs*, over and above what they are liable to if imported in British bottoms.

*Blackst.
Comm.*

BOTTOMRY, in commerce, (a practice which originally arose from permitting the master of a ship in a foreign country to hypothecate the ship in order to raise money to refit), is in the nature of a mortgage of a ship; when the owner takes up money to enable him to carry on his voyage, and pledges the keel or bottom of the ship (*pars pro toto*) as a security for the repayment. In which case it is understood, that if the ship be lost, the lender loses also his whole money; but if it return in safety, then he shall receive back his principal, and also the premium or interest agreed upon, however it may exceed the legal rate of interest. And this is allowed to be a valid contract in all trading nations, for the benefit of commerce, and by reason of the extraordinary hazard run by the lender. And in this case, the ship and tackle, if brought home, are answerable (as well as the person of the borrower) for the money lent. But if the loan is not upon the vessel, but upon the goods and merchandize, which must necessarily be sold or exchanged in the course of the voyage, then only the borrower, personally, is bound to answer the contract; who, therefore, in this case, is said to take up the money at *respondentia*. These terms are also applied to contracts for the repayment of money borrowed, not on the ship and goods only, but on the mere hazard of the voyage itself; when a man lends a merchant 1000*l.* to be employed in a beneficial trade, with condition to be repaid with extraordinary interest, in case such a voyage be safely performed; which kind or agreement, is sometimes called *fenus nauticum*, and sometimes *usura maritima*. But as this gave an opening for usurious and gaming contracts, especially upon long voyages, it was enacted by the statute 19 Geo. II. c. 37. that all monies lent on bottomry, or at *respondentia*, on vessels bound to or from the East Indies, shall be expressly lent only upon the ship, or upon the merchandize; that the lender shall have the benefit of salvage; and that if the borrower has not on board effects to the value of the sum borrowed, he shall be responsible to the lender for so much of the principal as hath not been laid out, with legal interest and all other charges, though the ship and merchandize be totally lost.

BOTTOMY. A cross bottomy, in heraldry, terminates at each end in three buds, knots, or buttons, re-

sembling, in some measure, the three-leaved grass; on which account Segouin, in his *Treſor Heraldique*, terms it *croix treſſee*. It is the badge of the order of St Maurice. See *HERALDRY Plates*.

BOTTRIGARO (Hercule), a person eminently skilled in the science of music, though not a musician by profession. He was a man of rank in Bologna; and appears, from several letters to him that have been printed, to have had the title of *Count*. He published several controversial pieces on the subject of music. It seems that he entertained strong prejudices in favour of the ancient music; and that he attempted, as Vincentino and others had done, to introduce the chromatic genus into practice, but with no better success than had attended the endeavours of others. He corrected Gogavino's Latin version of Ptolemy in numberless instances; and that to so good a purpose, that Dr Wallis has in general conformed to it in that translation of the same author which he gave to the world many years after. He also translated into Italian *Boetius de Musica*, and as much of Plutarch and Macrobius as relates to music: besides this, he made annotations upon Aristoxenus, Franchinus, Spataro, Vicentino, Zarlino, and Galisſei; and, in short, on almost every musical treatise he could lay his hands on, as appears by the copies which were once his own, and are now repositied in many libraries in Italy. Of Bottrigaro's works it is said, that they contain greater proofs of his learning and skill in music, than of his abilities as a writer, his style being remarkably inelegant: nevertheless, he affected the character of a poet; and there is extant a collection of poems by him, in 8vo, printed in 1557. Walther † represents him as an able mathematician, † *Musical Lexicon.* and a collector of rarities; and says that he was possessed of a cabinet, which the emperor Ferdinand II. had a great desire to purchase. He died in 1609.

BOTTS, in zoology, a species of worms which can be produced and nourished only in the intestines of a horse. It is there alone they can enjoy the proper temperature of heat, and receive the nourishment necessary for them. See *OESTRUS*.

Besides the long worms which have been observed in the bodies of horses, there are also short ones.—By these are to be understood what we call *botts*.

All authors, both ancient and modern, who have treated of the diseases of horses, have taken notice of these worms; but M. Vallisnieri is the first who has traced them to the last stage of their transformation, and has seen them change into a hairy kind of fly like the drone.

The flies from which these botts are produced inhabit the country, and do not come near houses, at least not near those of great towns; and therefore horses are never liable to have these worms (*i. e.* botts) in their bodies, if they have been kept in the house, especially in a town, during the summer and autumn.

It is in the former of these seasons, and perhaps too in the beginning of the latter, that the females of these flies apply themselves to the anus of horses, and endeavour to gain admittance, in order there to deposite their eggs, or perhaps their worms.

The precise instant of their entrance will scarce admit of an eye-witness, but by the merest chance; yet M. Vallisnieri says, that Dr Gaspari had attained this very uncommon sight. The Doctor (he tells us) was

Botts.

one day looking at his mares in the field; and from being very quiet, he observed, that on a sudden they became very restless, and ran about in great agitation, prancing, plunging, and kicking, with violent motions of their tails. He concluded, that these extraordinary effects were produced by some fly buzzing about them, and endeavouring to settle upon the anus of one of them; but the fly not being able to succeed, he observed it to go off with less noise than before, towards a mare that was feeding at a distance from the rest; and now the fly taking a more effectual method to obtain its design, passed under the tail of the mare, and so made its way to the anus. Here at first it occasioned only an itching, by which the intestine was protruded with an increasing aperture of the anus; the fly taking the advantage of this, penetrated further, and secured itself in the fold of the intestine:—this effected, it was in a situation proper for laying its eggs. Soon after this, the mare became very violent, running about, prancing, and kicking, and throwing herself on the ground; in short, was not quiet, nor returned to feeding, till after a quarter of an hour.

The fly then, we see, can find means of depositing its eggs, or perhaps its worm (*i. e.* botts), in the fundament of the horse; which once affected, it has done all that is necessary for them. If these bott-worms are not hatched when first deposited in the horse, but are then only eggs, it will not be long before it happens, from the nutritive heat they there receive.

These bott-worms soon make their way into the intestines of the horse: they occupy such parts of this region as are to them most convenient; and sometimes (as we shall see presently) they penetrate even to the stomach. All the hazard they appear to be exposed to, is that of being carried away from the places they have fixed on by the excrement, which may seem likely to drive all before it. But nature has provided for all things; and when we shall have further described these bott-worms, it will seem that they are able to maintain their situation, and to remain in the body of the horse, as long as they please.

There is a time when these bott-worms are of themselves desirous to leave this their habitation, it being no longer convenient for them after the purposes of their growth are answered. Their transformation to a fly must be performed out of the horse's body; and accordingly, when the time of their transformation draws near, they approach towards the anus of the horse; and then leave him of their own accord, or with the excrement, with which they then suffer themselves to be carried along.

According to Mr de Reaumur's observations, the bott-worms have two unequal claws, by which they are enabled to remain in the intestines of the horse in opposition to all efforts of the excrement to force them out.—These claws are of a sort of anchor, differently disposed from those of common anchors, but contrived to produce the same effect. Besides these two claws, nature has given them a very great number of triangular spines or bristles, very sufficient to arm them against the coats of the intestines, and to resist the force employed to drive them towards the anus, provided the head be directed towards the stomach of the horse.

It will be asked, no doubt, if these bott-worms are not dangerous to horses?—The mares which afforded

Mr de Reaumur, for several years, those on which he made his observations, did not appear to be less in health than those which had none; but it may sometimes happen, that they are in so great a quantity in the body of the horse as to prove fatal to him. M. Vallisnieri supposes these bott-worms to have been the cause of an epidemical disease that destroyed a great many horses about Verona and Mantua in the year 1713. —The observations communicated to him by Dr Gaspari sufficiently confirm his supposition. This gentleman, upon dissecting some horses that died of this distemper, found in their stomachs a surprising quantity of short worms; of which to give us some idea, he compares them to the kernels of a pomegranate opened: each of these, by gnawing on the coat of the stomach, had made to itself a kind of cellule therein, each of which would easily contain a grain of Indian wheat. It is easy to imagine by this means the stomach must be reduced to a wretched condition; the outer membranes were inflamed, and the inner ones ulcerated and corrupted; a very small quantity of these worms were found in the small intestines, and only a few in the larger, to which last they were found affixed, but had not corroded them. It is only perhaps when these bott-worms are in great numbers, and thereby incommode each other in the intestines of the horse, that they make their way towards the stomach; and indeed a very few flies must be enough to overstock the inside of a horse, provided they should deposit all their eggs, and such should all be animated, M. Vallisnieri having counted 700 and odd in the body of one single fly.

When one of these botts has left the anus of the horse, it falls on the ground; and immediately seeks out for some place of safety, where it may retire, to prepare for the last stage of its transformation, by which it is to become a fly. And now by degrees the skin hardens and thickens; and at length forms a solid shell or cod, the form of which scarce differs from that of the worm. It is first of a pale red colour, which changes into chestnut; and at length, by the addition of gradual and successive shades of brown, the shell is rendered black. The worm or bott, before it passes into a nymph, is of the form of an oblong ball; it remains in this form much longer than worms of the flesh-fly kind. M. de Reaumur met with worms that retained this figure five or six days; as yet, one can perceive no traces of the legs, wings, and head of the nymph. Hence he first learned, that those bott-worms do not become nymphs immediately upon their first change; but that, in order to become flies, they must undergo one change more than caterpillars ordinarily do to become butterflies.—For the cure of horses troubled with botts, see FARRIERY, § xix.

BOTWAR, a town of Germany, in the circle of Suabia, and subject to the duke of Wirtemberg. E. Long. 9. 15. N. Lat. 49. 0.

BOTZENBURG, a town of Germany, in the duchy of Mecklenburg. It had a castle, which was destroyed by the Danes in 1202. It is seated on the Elbe, and the vessels that pass by are obliged to pay a considerable toll. E. Long. 10. 48. N. Lat. 53. 34.

BOVA, an episcopal town of Italy, in the kingdom of Naples, seated near the Appennine mountains. E. Long. 16. 15. N. Lat. 37. 15.

BOUCHAIN, a fortified town of the French Netherlands,

Botts

Bouchain.

Bouche, ther'ands, in the province of Hainault. It is divided into two parts by the river Scheld. It was taken by the French in 1676; and by the allies under the duke of Marlborough in 1711, which was the last military achievement of that great general; but the following year it was retaken by the French. E. Long. 3. 15. N. Lat. 50. 17.

BOUCHE OF COURT, the privilege of having meat and drink at court scot-free. The word is also written *bouge*, *bouge*, and *budge*; it is mere French, where it signifies *mouth*.—The French still use the phrase, *Avoir bouche à la cour*; that is, *to have table or diet at court*. This privilege is sometimes only extended to bread, beer, and wine: it was a custom anciently in use, as well in the houses of noblemen as in the king's court. Thomas earl of Lancaster retained Sir John de Ewre, to serve him with ten men at arms in time of war, allowing them *bouge of court*, with livery of hay and oats, horse-shoes and nails. Sir Hugh Merrill had the same privilege for life, on condition of serving king Edward II.

BOUCHET (John), a French poet and historian flourished in the 16th century. The most considerable of his writings are the *Annals of Aquitaine*, and his *Chapelet des Princes*.

BOUDRY, a small town of Swisserland, in the province of Neufchatel, and capital of a chatelainry of the same name. E. Long. 7. 5. N. Lat. 47. 11.

BOVEY-COAL, an inflammable fossile found in England, France, Italy, Swisserland, Germany, Ireland, &c. Its colour is brown or brownish black, and of a laminar structure. It is composed of wood, penetrated by petrol or bitumen; and frequently contains pyrites, alum, and vitriol.

BOUFLERS (Lewis Francis, duke of), a peer and marshal of France, was born in 1644. He distinguished himself by his valour and conduct in several sieges and battles, and had the command of the right wing when the French were defeated at the bloody battle of Malplaquet. He died at Fountainbleau in 1711.—Marshal Boufflers, his son, died at Genoa, after having delivered that republic.

BOUGEANT (William Hyacinth), a famous Jesuit, first taught humanity at Caen and Nevers, and afterwards settled at the college of Louis the Great, where he employed himself in writing several works; the principal of which were, 1. A collection of physical observations, extracted from the best authors. 2. An history of the wars and negociations which preceded the treaty of Westphalia. 3. The female doctor, a philosophical amusement on the language of beasts, &c. He died in 1743.

BOUGH, denotes much the same with **BRANCH**.—Green boughs anciently made part of the decoration of altars and temples, especially on festival occasions. Oaken boughs were offered to Jupiter; those of laurel, to Apollo; of olive, to Minerva; myrtle, to Venus; ivy, to Bacchus; pine, to Pan; and cypress to Pluto. Some make them the primitive food of mankind before acorns were invented.

BOUGIE. In the French language it signifies a wax candle, and is applied to a machine which (as the wax candle formerly was) is introduced into the urethra for removing obstructions there. Mons. Daran, a French surgeon, lately boasted of his introducing them

as an improvement in his art, and acquired considerable profit by making and selling them. Scultetus, about the middle of the 17th century, used bougies in diseases of the urethra, and Mons. Daran probably took the hint from him. Different compositions have been used, and generally mercury was a part of them. Riverius made a plaster as follows: R. ol. oliv. lb iv. ceræ citrin. lb ii. minii & ceruff. āā lb iſs tereb. venet. & rez. alb. āā 3 iii m. Whether the bougies are made up of this or any other composition, they must be of different sizes, from the bigness of a knitting needle to that of a goose quill. They are made of linen rags; spread with a proper matter, and then rolled up as follows. Having spread any quantity of the linen rag with the composition that is chosen for the purpose, cut it into slips from six to ten inches long, and from half an inch to an inch broad: then dexterously roll them on a glazed tile into the form of a wax candle; and as the end of the bougie that is to be entered first into the urethra should be somewhat smaller than the rest, it would be as well to cut the slips a little tapering. It should also be observed, that when the bougies are rolled up, that side must be outward on which the plaster is spread.

Mons. Daran, and some others, attributed the action of their bougies to the composition they made use of in forming them. Mr Sharp apprehended, that as much of their efficacy was owing to the compression they made on the affected part, as to any other principle; and Mr Aiken very justly says, As it is evident that bougies of very different compositions succeed equally well in curing the same disorders in the urethra, it is plain that they do not act by means of any peculiar qualities in their composition, but by means of some property common to them all. This must be their mechanical form and texture, therefore their mode of action must be simple compression. The efficacy of mere compression in many cases of constriction is well known, from the use of sponge tents for widening parts that are straitened by cicatrices; and admitting obstructions in the urethra to be from a constriction formed by cicatrized ulcers, or a projection of the spongy substance of the urethra into the canal, we may easily conceive, that a gentle continued elastic compression will in time overcome the disease. We may also readily account for the inferior efficacy of metallic and whalebone bougies, from their not having the property of swelling with moisture, and therefore not making so equal a compression. As to bougies procuring a discharge of matter, there is no doubt but the mechanical stimulus of a foreign body in such a tender part, though free from disease, must produce it in some degree; and that this will be varied according to the chemically irritating quality of the composition, and the irritable state of the urethra: but it seems an absurdity to apply a topic, made uniform throughout, to the whole length of a canal, with a view of producing extraordinary effects upon a particular part of it, by means of some powerful quality in the ingredients. As to that part of the bougie which was in contact with the diseased part, being particularly covered with matter; this circumstance is probably owing to the greater irritation of that part of the urethra where the disorder is, than any other.

BOUHOURS (Dominic), a celebrated French critic, was born at Paris in 1628; and has been by some

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Bouhours considered as a proper person to succeed Malherbe, who died about that time. He was entered into the society of Jesuits at the age of 16; and was appointed to read lectures upon polite literature in the college of Clermont at Paris, where he had studied: but he was so incessantly attacked with the headach, that he could not pursue the destined task. He afterwards undertook the education of two sons of the duke of Longueville, which he discharged with great applause. The duke had such a regard for Bouhours, that he would needs die in his arms; and the "Account of the pious and Christian death" of this great personage was the first work which Bouhours gave the public. He was sent to Dunkirk to the Popish refugees from England; and in the midst of his missionary occupations, found means to compose and publish books. Among these were, *Entretiens d'Ariste & d'Eugene*, or "Dialogues between Aristus and Eugenius; a work of a critical nature, and concerning the French language. His book was printed no less than five times at Paris, twice at Grenoble, at Lyons, at Brussels, at Amsterdam, at Leyden, &c. and embroiled him in quarrels with a great number of censors, with Menage in particular, who, however, lived in friendship with our author before and after. The fame of this piece, and the pleasure he took in reading it, recommended Bouhours so effectually to the celebrated minister Colbert, that he trusted him with the education of his son the marquis of Segnelai. He wrote afterwards several other works; the chief of which are, 1. Remarks and doubts upon the French language. 2. Dialogues upon the art of thinking well in works of genius. 3. The life of St Ignatius. 4. The art of pleasing in conversation. 5. The life of St Francis Xavier, apostle of the Indies and of Japan. This last work was translated from the French into English by Mr Dryden, and published at London in the year 1668, with a dedication prefixed to James II.'s queen.

BOUILLON, a town of France in the duchy of the same name, and in the county of Luxemburg, with a fortified castle. The French took it in 1676; upon which it was given to the duke of Bouillon; but the king keeps the castle to himself, which is seated on a rock that is almost inaccessible. E. Long. 5. 20. N. Lat. 49. 45.

BOUILLON, in the manege, a lump or excrescence of flesh that grows either upon or just by the frush, inso-much that the frush shoots out, just like a lump of flesh, and makes the horse halt; and this is called the *flesh blowing upon the frush*. Manege horses, that never wet their feet, are subject to these excrescences, which make them very lame. See **FRUSH**.

BOVINA AFFECTIO, a distemper of black cattle, caused by a worm lodged between the skin and the flesh, and perforating the same. This distemper is not mentioned by the ancient Greeks, and is but little known in Europe.

BOVINES, a small town of the Austrian Netherlands, in the province of Namur, seated on the river Maese or Meuse, in E. Long. 4. 50. N. Lat. 49. 45.

BOVINO, an episcopal town of Italy, in the Capitanata, seated at the foot of the Apennine mountains, in E. Long. 16. 15. N. Lat. 41. 17.

BOVIUM, (Itinerary); a town of the Silures, in Britain, fifteen miles to the south of Isca Silurum, or

Caer-leon, in Monmouthshire: Now called *Cowbridge*; according to Baudrand, *Bangor* in Carnarvonshire.

BOULAINVILLIERS (Henry de), Lord of St Saife, and an eminent French writer, was descended from a very ancient and noble family, and born at St Saife in 1658. His education was among the fathers of the oratory; where he discovered from his infancy those uncommon abilities for which he was afterwards distinguished. He applied himself principally to the study of history; and his performances in this way are numerous, and considerable. He was the author of a history of the Arabians; Fourteen letters upon the ancient parliaments of France; a History of France to the reign of Charles VIII.; the State of France, with historical memoirs concerning the ancient government of that monarchy, to the time of Hugh Capet, "written (says M. Montesquieu) with a simplicity and honest freedom worthy of that ancient family from which their author was descended." M. Boulainvilliers died at Paris in 1722; and after his death was published his Life of Mahomet.

BOULANGER (Nicholas Anthony), a very singular Frenchman, was born at Paris in 1722, and died there in 1759, aged only 37. During his education, he is said to have come out of the college of Beauvais almost as ignorant as he entered into it; but struggling hard against his unaptness to learn, he at length overcame it. At seventeen, he began to study mathematics and architecture; and in three or four years made such a progress, as to be useful to the baron of Thiers, whom he accompanied to the army in quality of engineer. Afterwards he had the supervision of the highways and bridges; and he executed several public works in Champagne, Burgundy, and Lorrain. The author of his life, in the *Dictionnaire des Hommes celebres*, writes, that in this province a terrible spirit discovered itself in him, which he himself did not suspect before; and this was, it seems, the spirit of "thinking philosophically." In cutting through mountains, directing and changing the courses of rivers, and in breaking up and turning over the strata of the earth, he saw a multitude of different substances, which (he thought) evinced the great antiquity of it, and a long series of revolutions which it must have undergone. From the revolutions in the globe, he passed to the changes that must have happened in the manners of men in societies, in governments, in religion; and he formed many conjectures upon all these. To be farther satisfied, he wanted to know what, in the history of ages, had been said upon these particulars; and, that he might be informed from the fountain-head, he learned first Latin and then Greek. Not yet content, he plunged into Hebrew, Syriac, Chaldean, and Arabic; and acquired so immense an erudition, that, if he had lived, he would have been one of the most learned men in Europe: but death, as we have observed, prematurely took him off. His works are, 1. *Traité du Despotisme Oriental*, 2 vols 12mo; a very bold work; but not so bold and licentious as, 2. *L'Antiquité dévoilée*, 3 vols 12mo. This was posthumous. 3. He furnished to the *Encyclopédie* the articles *Deluge*, *Corvée*, and *Société*. 4. He left behind him in MS. a Dictionary, which may be regarded as a concordance in ancient and modern language. As a man, he is said to have been of a sweet, calm, and engaging

Boulanger gaging temper; which, however, it is very difficult to reconcile with the dark, impetuous ardent spirit, that appears to have actuated him as a writer.

BOULANGER (John), an engraver, who flourished towards the end of the last century, was a native of France. His first manner of engraving appears to have been copied, in some degree, from that of Francis de Poilly; but soon after he adapted one of his own, which, though not original, he however greatly improved: He finished the faces, hands, and all the naked parts of his figures, very neatly with dots instead of strokes, or strokes and dots. The effect is singular enough, and by no means unpleasing; only, in some few instances, he has opposed the coarse graving of his draperies, and back ground, so violently to the neater work of the flesh, that the outline of the latter is thereby rendered hard, and the general appearance of it flat and chalky. This style of engraving has been carried to its greatest perfection in the present day, particularly in England. He did not draw the naked parts of his figures correctly, or with fine taste. His draperies are apt to be heavy, and the folds not well marked. However, his best prints possess much merit, and are deservedly held in great esteem.

BOULAY (Cæsar Egasse du), in Latin *Bulus*, was born at St Ellier, a village of Maine in France; and became professor of humanity at the college of Navarre, register, rector, and historiographer of the university of Paris. He died in 1678, after having published several works. The principal of them are, *A History of the University of Paris*, in Latin, 6 vols folio; and the *Treasure of Roman Antiquities*, in 1 vol. folio.

BOULCOLACA, among the modern Greeks, denotes the spectre of some wicked person who died excommunicated by the patriarch, reanimated by the devil, and causing great disturbance among the people; of which many strange stories are told. The word is Greek, and is sometimes written *βουκολακος*, *broukolakos*; and supposed to be derived from *βουκος*, or *βερκα*, "mud," and *λακος*, a "ditch," on account of the filthiness of the fight.

BOULDER-WALL, a kind of wall built of round flints or pebbles, laid in strong mortar, and used where the sea has a beach cast up, or where there are plenty of flints.

BOULETTE, in the manege. A horse is called *beulette*, when the fetlock, or pattern-joint, bends forward, and out of its natural situation, whether through violent riding, or by reason of being too short-jointed, in which case the least fatigue will bring it.

BOULLOGNE (Bon de), a painter of some eminence, was born at Paris in 1649. From his father Louis de Boullogne he learned the first principles of the art; but went to Rome in order to perfect himself from the works of the best masters. He abode in Italy five years. He excelled in history and portrait. His talents for copying the pictures of the great Italian painters were so very extraordinary, that he frequently deceived the greatest judges. He died at Paris in 1717, aged 68.

BOULLOGNE (Louis de), born at Paris in 1654, was the younger brother of the preceding; and like him learned from his father the first principles of painting, and afterwards went to Rome to complete his studies. His works, on his return, were so much

esteemed, that Louis XIV. honoured him with the order of St Michael, and, after the death of Antony Coypell, appointed him his principal painter. He chiefly excelled in historical and allegorical subjects. He died at Paris in 1734, aged 80 years.

BOULLONNE (Lewis), painter to the French king, and professor of the academy of painting, distinguished himself by his art; and died at Paris in 1674, aged 65. There are three of his pictures in the church of Notre Dame. — He left two sons who were admired for their skill in painting. The elder, who is well known under the name of *Bon Boullonne*, was first instructed by his father; after which he went to perfect himself in Italy, and for that purpose the king allowed him a pension: at his return, he was made professor of the academy of painting. Louis XIV. employed him in adorning several of his palaces; and there are a great number of his pictures at Paris. His talents for copying the pictures of the great Italian masters were so very extraordinary, that he frequently deceived the greatest judges. He died in 1717. — *Lewis Boullonne* his brother, after being also instructed by his father, gained the prize of painting at 18 years of age; upon which he obtained the king's pension. He set out for Italy at his brother's return, and acquired great skill in designing and colouring. At his return to Paris he was much employed; and at length became director of the academy of painting, knight of the order of St Michael, and first painter to the king. Louis XIV. allowed him several pensions, and raised him and his posterity to the rank of nobility. He embellished the church of the Invalids, the chapel of Versailles, &c. and died at Paris in 1733.

BOULOGNE, a large and handsome town of Picardy in France, and capital of the Boulognois, with a harbour, and a bishop's see. It is divided into two towns; the higher, and the lower. The former is strong both by nature and art; and the latter is only surrounded with a single wall. The harbour has a mole for the safety of the ships, which at the same time prevents it from being choaked up. The lower town is inhabited by merchants, and has three large streets, one of which leads to the high town, and the other two run in a line on the side of the river. Many of the English and Scots reside here, who, from a rebellion, or any other cause, are obliged to fly from their native country. E Long. 1. 42. N. Lat. 50. 42.

BOULOGNOIS, a territory of France, in the north part of Picardy, about 30 miles in length and 20 in breadth. The chief town is Boulogne, and the chief trade is in pit coal and butter.

BOULTER (Dr Hugh), was born in or near London, of reputable and wealthy parents. He was educated at Merchant-taylor's school; and, before the Revolution, was from thence admitted to a commoner of Christ-church in Oxford. Some time after, he was chosen a demy of Magdalen college, at the same election with Mr Addison and Dr Wilcox. From the merit and learning of the persons elected, this was commonly called by Dr Hough, president of the college, the *golden election*. He afterwards became fellow of the same college; in which station he continued in the university till he was invited to London by Sir Charles Hodges, principal secretary of state, in the year 1700, who made him his chaplain, and recommended him to Dr Teni.

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Tenison archbishop of Canterbury; but his first preferences were owing to the earl of Sunderland, by whose interest and influence he was promoted to the parsonage of St Olave in Southwark, and the archdeaconry of Surry. Here he continued discharging very faithfully and diligently every part of his pastoral office, till he was recommended to attend George I. as his chaplain when he went to Hanover in 1719. He had the honour to teach prince Frederic the English language; and by his conduct he so won the king's favour, that he promoted him to the deanery of Christ-church, and the bishopric of Bristol, in the same year. As he was visiting his diocese five years afterwards, he received a letter from the secretary of state, acquainting him that his majesty had nominated him to the archbishopric of Armagh and primacy of Ireland. This honour he would gladly have declined; and desired the secretary to use his good offices with his majesty to excuse him from accepting it. Ireland happened to be at this juncture in a great flame, occasioned by Wood's ruinous project; and the ministry thought that the bishop would greatly contribute to quench it by his judgment, moderation, and address. The king therefore laid his absolute commands upon him: to which he submitted, but with some reluctance. As soon as he had taken possession of the primacy, he began to consider that country, in which his lot was cast for life, as his own; and to promote its true interest with the greatest zeal and assiduity. Accordingly, in innumerable instances, he exerted himself in the noblest acts of beneficence and public spirit. In seasons of the greatest scarcity, he was more than once instrumental in preventing a famine which threatened that nation. On one of these occasions he distributed vast quantities of corn throughout the kingdom, for which the House of Commons passed a vote of public thanks; and at another time 2500 persons were fed at the poor-house in Dublin, every morning, and as many every evening, for a considerable time together, mostly at the primate's expence. When schemes were proposed for the advantage of the country, he encouraged and promoted them not only with his counsel but his purse. He had great compassion for the poor clergy of his diocese, who were disabled from giving their children a proper education; and he maintained several of the children of such in the university. He erected four houses at Drogheda for the reception of clergymen's widows, and purchased an estate for the endowment of them. His charities for augmenting small livings and buying glebes amounted to upwards of 30,000 l. besides what he devised by will for the like purposes in England. In short, the instances he gave of his generosity and benevolence of heart, his virtue, his piety, and his wisdom, are almost innumerable, and the history of his life is his noblest panegyric. This excellent prelate died at London, on the 2d of June 1742, and was interred in Westminster-abbey, where a beautiful monument of finely polished marble is erected to his memory.

BOULTINE, a term which workmen use for a moulding, the convexity of which is just one-fourth of a circle; being the member just below the plinth in the Tuscan and Doric capital.

BOULAKE, in the military orders of the Turks, a body of the janizaries, with an officer in the place of a colonel at their head, sent upon some particular enter-

prize; they are selected out of the body for this, and, as soon as the business is over, are received again into their former companies.

BOUM (anc. geog.), a town in Ethiopia beyond Egypt, on the west side of the Nile.

BOUM SOLIS STABULA (anc. geog.), the territory of Mylæ, so called: A peninsula on the east coast of Sicily, to the north of Syracuse; remarkable for its fertility and rich pastures (Theophrastus): and hence arose the fable of the oxen of the sun feeding there (Scholiast on Apollonius). Pliny and Seneca say, that something like dung is thrown out on the coast of Mylæ and Messana, which gave rise to the fable of the oxen of the sun being stalled there; and at this day the inhabitants affirm the same thing (Cluverius).

BOUNCE, in ichthyology, the English name of a species of squalus. See SQUALUS.

BOUND, in dancing, a spring from one foot to the other; by which it differs from a hop, where the spring is from one foot to the same. It also differs from a half coupee, as in the latter the body always bears on the floor, either on one foot or the other; whereas, in the bound, it is thrown quite from the floor.

BOUND-Bailiffs, are sheriffs officers for executing of process. The sheriffs being answerable for their misdemeanors, the bailiffs are usually bound in a bond for the due execution of their office; and thence are called *bound bailiffs*, which the common people have corrupted into a much more homely appellation.

BOUNDS OF LANDS. See ABUTTALS.

BOUNTY, in commerce, a premium paid by government to the exporters of certain British commodities, as sail-cloth, gold and silver lace, silk-socks, fish, corn, &c. The happy influence which bounties have on trade and manufactures is well known: nor can there be a more convincing proof of the good intentions of the government under which we live, than the great care that is taken to give all possible encouragement to those who shall establish or improve any hazardous branch of trade.

All undertakings, in respect either to mercantile enterprises, or in the establishment of manufactures, are weak and feeble in their beginnings; and if unsuccessful, either sink entirely, or at least are seldom revived in the same age. Accidents of this nature are not only destructive to private persons, but exceedingly detrimental to the public interest. On this principle, more especially since trade, for which Providence designed us, hath been attended to, such attempts have been thought deserving, and have been favoured with, public support. This in former times usually flowed from the crown, in the form of letters-patent, charters, or other grants of privileges, which, however requisite they might be, were notwithstanding very frequently objects of censure. If such as obtained them failed in their endeavours, they were reputed *projectors*; if, on the other hand, they succeeded, they were considered as *monopolizers*. Corporations, which imply the uniting certain individuals into a body, that they may thereby become more useful to the community, are created by the crown. Many of these were formed for promoting trade; and, according to the old system of our government, were necessary and useful. On the same principle, privileges were granted to private persons,

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Bounty. sons, on a suggestion, that what was immediately of use to them would terminate in public utility. These also did good in bringing in many arts and manufactures; though, in some cases, tending to private interest more than public emolument, they were liable to legal correction. In later times, and in concerns of moment, a much better method has been adopted, as often as it hath been found practicable, by rejecting private or particular interest, and proposing the designed advantages to such as should perform the stipulations on which they are granted. These bounties, as they are paid by the public, so they are solely calculated for the benefit of the public. They are sometimes given to encourage industry and application in raising a necessary commodity; which was intended by the bounty on exporting corn. The intention of this bounty was to encourage agriculture; and the consequence hath been, that we now grow more than twice as much as we did at the establishment of the bounty; we even consume twice as much bread as we then grew; yet in A. D. 1697, we exported a fifteenth part of what we grew, of late years a twenty-ninth part only. The bounty on this twenty-ninth part amounted to somewhat more than L. 50,000, and the produce to more than L. 400,000. It is evident that all this is so much clear gain to the nation. But this is far from being all that we have annually gained. For if our cultivation is doubled, as indeed it is, then the rent of lands, the subsistence of working hands, the profits of the tradesmen supplying them with utensils, clothes, the value of horses employed, &c. must all be taken into the account. Besides this we must add the freight (amounting to half the bounty), to make the idea of the advantages complete.

Sometimes bounties are given with a view to promote manufactures, as in the case of those made of silk. Many laws are to be found in our statute-books in favour of the silk manufacture, made with great wisdom and propriety, for the encouragement and support of many thousands of industrious persons employed therein. By statute 8 Geo. I. cap. 15. § 1. a bounty was given on the due exportation of ribbons and stuffs, of silk only, of three shillings upon a pound weight; silks, and ribbons of silk, mixed with gold and silver, four shillings a pound; on silk gloves, silk stockings, silk fringes, silk laces, and sewing silk, one shilling and threepence a pound; on stuffs of silk and grogram yarn, eightpence a pound; on silks mixed with incl or cotton, one shilling; on stuffs of silk mixed with worsted, sixpence a pound, for three years: and, from experience of their utility, these were continued by subsequent statutes.

Sometimes bounties are given to support a new manufacture against foreigners already in possession of it, as in making linen and sail-cloth. The promoting of the manufacture of British sail-cloth was undoubtedly a very important national object, as the consumption was very large, and of consequence the purchase of it from foreigners an heavy expence on the public. Many methods were therefore devised, and countenanced by law, both here and in Ireland, for introducing and encouraging our own in preference to that of strangers, more especially in the royal navy. By stat. 12 Anne, cap. 16. § 2. a bounty was given of one penny per ell on all that was exported for a term, and continued by subsequent statutes. By 4 Geo. II. cap. 27. § 4. an

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additional bounty of another penny an ell is granted. These bounties were to be paid out of an additional duty on imported sail-cloth. By the same statute every ship built in Britain, or in the plantations, is, under the penalty of L. 50, to be furnished with a complete suit of sails of British manufacture. The amount of these bounties mark the progress of the manufacture, which is also assisted by the fund on which the payment is assigned.

The assistances, however, are never bestowed but on mature deliberation, in virtue of strong proofs, and with a moral certainty of a national benefit. The great intention of bounties is to place the British trader on such ground as to render his commerce beneficial to his country. In order to this, some profit must accrue to himself, otherwise he would not embark therein; but this, whatever it be, must prove inconsiderable in comparison of what results to the public. For if, by the help of such a bounty, one or many traders export to the value of 1000, 10,000, or 100,000 pounds worth of commodities or manufactures, whatever his or their profit or loss (for the latter, through avidity and overloading the market, sometimes happens) may be, the nation gains the L. 1000, L. 10,000, or L. 100,000; which was the object of the legislature in granting the bounty. Upon this consideration, that the entire produce of what is exported accrues to the nation, the legislature, when an alteration of circumstances required it, have made no scruple of augmenting a bounty; as in the case of refined sugar exported, from three to nine shillings per hundred weight. In like manner, the original bounty of one pound per ton in favour of vessels employed in the whale-fishing hath been doubled, and many new regulations made, in order to render this fishery more advantageous to the public. As a bounty is given on malt when allowed to be exported, so an equivalent of 30 shillings per ton hath been granted on all British made malt-spirits when exported, which is a common benefit to land, manufacture, and commerce.

It is indeed true, that on whatever account, or to whatever amount, this reward is given, the public seem to pay, and private persons seem to receive. But these private persons receive it as the hire from the public, for performing a service which otherwise they would not perform, the benefit of which accrues to the public, and who can therefore very well afford to pay that reward in reality, which, as we have stated it, she only seems to do. For, looking a little closer, we cannot help observing, that the bounty is paid to individuals, who, as such, make a part of the public. But the commodities or manufactures exported are sold to foreigners and the whole produce of them, be it what it will, comes into the purse of the public. By attending to this self-evident doctrine, every reasonable and public-spirited man will be easily reconciled to bounties; and the three following considerations will be sufficient to obviate the most common objections that have been made to the practice of giving them. 1. That no bounty can be desired but on the plea of national utility, which always deserves notice, and cannot be mistaken. It must likewise be alleged and proved, that this is the only means whereby the national benefit can be attained. 2. The sums issued on this account not only show the clear expence of the bounty, but also indicate the profit gained by the public; for as the one

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cannot exist without the other, that amount must be the incontestable index of both. 3. It must be remembered (and of this too some instances might be given), that if bounties should be improperly bestowed, they will of course prove ineffectual, and after a few fruitless trials will remain unclaimed, and consequently produce no expence. There is indeed another objection which hath been made against the giving of bounties. This is grounded on the frauds to which they are supposed to be liable; and particularly the relanding of the goods on which the bounty hath been paid, and thereby deceiving and cheating the public. But whoever peruses the laws made on this head, and attentively considers the numerous precautions taken to fix every circumstance relative to the obtaining the bounty, the checks on the shipping of goods, the securities taken for their due exportation, the certificates required to ascertain their being actually delivered and sold in a foreign market, must be convinced, that to discharge all those securities, in case of an intended fraud, is a thing very difficult, if not impossible.

To these remarks we may add, that bounties are usually granted only for a limited time, and then expire; are always liable to be suspended; and of course can never be the cause of any great national loss. There is no doubt that, exclusive of frauds, the immoderate thirst of gain may tempt interested men to aim at converting what was calculated for public benefit to its detriment, for their own private advantage. Thus, on a prospect of short crops in other countries, men may take measures within the letter, but directly against the spirit, of the law, to send so much of our corn abroad as to endanger a famine at home. For this the wisdom of parliament provides, not barely by suspending the bounty, but by prohibiting exportation and opening the ports for foreign supplies. We cannot with any shadow of justice ascribe scarcity to the bounty on the exportation. If this was the case, suspensions would be frequent, whereas there have been but five in a course of 70 years. If the bounty had any share, the larger the exportation, the greater would be the scarcity. In A. D. 1750 we exported more than one fifth of our growth of wheat, which was notwithstanding but at four shillings per bushel; whereas a century before, A. D. 1650, when we had neither bounty nor exportation, wheat was at nine shillings and sixpence per bushel. The causes of scarcity are unkindly seasons; which though human policy cannot prevent, yet their sad effects have been evidently lessened by our increased growth, since the taking place of bounty and exportation.

Queen Anne's BOUNTY, for augmenting poor livings under L. 50 *per annum*, consists of the produce of the first-fruits and tenths, after the charges and pensions payable out of the same are defrayed. A corporation for management of the same was settled, &c. in 1704. See AUGMENTATION.

BOURBON, or MASCARENHAS, (isle of), an island in the Indian ocean, lying to the east of Madagascar, in E. Long. 58. 30. S. Lat. 21. 23. This island has no port, and is in some places inaccessible. Its length and breadth have not been well determined; but the circumference, according to the account of a person who resided there some time, is about 57 leagues. It is for the most part mountainous, but in some places

there are very beautiful and fertile plains. In the south part of the island there is a burning mountain, which has thrown out vast quantities of bitumen, sulphur, and other combustible materials; neither does it cease throwing them out still, so that the country about it is useless, and is called by the inhabitants *pays brule*, that is, burnt land. The shore is high and rocky all round; but though on this account it hath no ports, there are several good roads, particularly one on the west, and another on the north-east. As to its form, this island is irregular, so that it is difficult to judge from the maps whether it is round or long. The air is equally pleasant and wholesome, insomuch that the people live to a great age without feeling either infirmities or diseases. This is occasioned by the hurricanes, of which they have one or two every year. These purge and cleanse the air, so as to render it highly salubrious; the certainty of which is thus distinguished, that when they fail of making their annual visits, as sometimes they do, diseases and death find an entrance into the island, which otherwise would soon be overstocked with inhabitants. The climate is hot, but not to such a degree as might be expected from its situation, the breezes from the mountains being constant and very refreshing. The tops of these mountains are in winter covered with snow; which, melting in the summer, furnishes abundance of rivers and rivulets, with which the country is plentifully watered: so that the soil, though not very deep, is wonderfully fruitful, producing Turkey corn and rice twice a-year, and the latter in great abundance. Most sorts of cattle are found here, good in their kind, and are very cheap; wild goats and wild hogs are found in the woods and on the tops of the mountains; here also are vast quantities of wild fowl of different kinds, fish, and land tortoises, affording at once the most delicate and wholesome food. As to fruits, they have bananas, oranges, citrons, tamarinds, and other kinds; neither does it want valuable commodities, particularly ebony, cotton, white pepper, gum benzoin, aloes, and tobacco; all excellent in their kind, when compared with those of other countries. This island is also happy in its deficiencies; for no animals that are venomous are to be found therein, and only two sorts that are disagreeable to the sight, *viz.* spiders of the size of a pigeon's egg, which weave nets of a surprising strength, reckoned by some capable of being treated so as to become as valuable as silk; and bats of a most enormous size, which are not only skinned and eaten, but esteemed also the greatest delicacy that they have.

The island of Bourbon was discovered by the Portuguese in 1545, as appears by a date inscribed by them upon a pillar when they first landed; but when the French settled in Madagascar, this island was totally desolate. Three Frenchmen being banished thither, and left there for three years, made such a report of it at their return as surprised their countrymen. They lived most of that time upon pork; and though they were in a manner naked, yet they affirmed that they never had the least pain or sickness whatever. This tempted one Anthony Taureau to go over thither in 1654, accompanied by seven French and six negroes, who carried with them the cattle from which the island has been stocked ever since. The first thing they did was to erect the arms of France, by order of Mr Falcourt

Bourbon.

Bourbon. Falcourt who was governor of Madagascar, and to bestow upon the island a new name. Then they set up huts, and laid out gardens, in which they cultivated melons, different sorts of roots, and tobacco; but just as the last became ripe, the whole plantation was destroyed by a hurricane. The French, however, went to work again; and by having some acquaintance with the climate, succeeded better, and added aloes to the rest of their plantations: but receiving no succour from Madagascar, and being tired of living by themselves in the isle of Bourbon, they very readily embraced the offer of an English captain, and in the year 1658 embarked for Madras. When the last great blow was given to the French at Madagascar by the natives, who surprised and cut them off in one night, there escaped as many men, as with their wives, who were natives, filled two canoes; and these being driven by the wind on the isle of Bourbon, were the next set of people who inhabited it. This last colony, for want of an opportunity to remove, were constrained to cultivate this new country of theirs, and to remain in it. It was not long before a further flock of inhabitants arrived. A pirate that had been committing depredations in the Indies, returning to Europe, ran ashore and was split to pieces upon the rocks, so that the crew were forced to join themselves to the former inhabitants; and as they had on board their vessel a great many Indian women whom they had made prisoners, they lived with them, and in process of time had a numerous posterity. As East India ships touched frequently here, when too late to double the Cape, many of the sailors, for the sake of the women, deserted at the time of their departure, and staying behind became planters in the isle of Bourbon. As the place grew more populous, the people naturally became more civilized, and desirous of living in a more commodious manner; which induced them to build small vessels, that in these they might sometimes make a trip to Madagascar, in order to purchase slaves, whom they employed in their plantations to cultivate aloes, tobacco, and other things, with which they drove a small trade, when ships of any nation anchored in their roads for the sake of refreshments. In this situation they were, when the French East India company put in their claim; and assuming the property of the island, sent thither five or six families and a governor. At first the inhabitants expected to reap some benefit from their new masters; but finding very little, and thinking the governor took too much upon him, they revolted at the instigation of a priest, seized their governor and put him into a dungeon, where he died of hunger and grief. For this some of the ring-leaders were punished, a kind of fort was erected, some guns placed on it, and the French flag kept flying; but in other respects, so little care was taken, that, till within these 40 years, the island was in no state of defence.

The number of inhabitants, in the year 1717, was computed at 2000; viz. 900 free, and 1100 slaves. Amongst these people the usual distinction of whites and blacks entirely fails: for even the free are of different colours; and a French writer assures us, that he saw in a church one family, consisting of five generations, of all complexions. The eldest was a female, 108 years of age, of a brown black, like the Indians of Madagascar; her daughter, a mulatto; her grand-daughter, a mestizo;

her great grand-daughter, of a dusky yellow; her daughter, again, of an olive colour; and the daughter of this last, as fair as any English girl of the same age. These people are, generally speaking, of a gentle quiet disposition; very industrious; and submissive enough to authority, provided it is exercised with a tolerable degree of equity and decency; for otherwise the whole of them are apt to rise in rebellion at once; and the slaves have so little reason to complain of their masters, that they are always on the same side. The island is divided into four quarters. The first is that of St Paul, which is the largest and best peopled: their houses are built at the foot of a steep mountain, on both sides of a fresh water lake. As for the plantations, they are on the top of a mountain, which they ascend by a very rough and troublesome passage. On the summit there is a specious plain, a great part of which is divided into plantations of rice, tobacco, corn, sugar, and fruits. The quarter of St Dennis lies seven leagues from that of St Paul, towards the east, and there the governor resides. It is not so well peopled as the former; but the country is more pleasant, and the situation better. At two leagues distance, proceeding along the sea coast, is the quarter of St Mary's, which is but thinly peopled. The last and most fertile quarter is that of St Sufannah, which is at the distance of four leagues from St Dennis. The road between these two quarters is tolerable, though part of it has been cut with much difficulty through a wood; but the passage from St Dennis to St Paul is only by sea.

When the present company of India became, by their perpetual establishment, possessed of the island of Bourbon, they began to improve it exceedingly: raising new forts and batteries, so as to render it in a manner inaccessible; and importing coffee-trees from Arabia, which have succeeded so well, that it is believed they produce an eighth, according to some a sixth, part as much coffee as is raised in the kingdom of Yemen in Arabia, and it is likewise held next in goodness to that. — In 1763, the population amounted to 4627 white people, and 15149 blacks; the cattle consisted of 8702 bees, 4084 sheep, 7405 goats, and 7619 hogs. Upon an extent of 125,909 acres of cultivated land, they gathered as much cassava as would feed their slaves, 1,135,000 pounds weight of corn, 844,100 pounds of rice, 2,879,100 pounds of maize, and 2,535,100 pounds of coffee; which last the company bought up at about 3 d. per pound.

In 1748, Admiral Boscawen appeared before this island with a British fleet; but found it so well fortified both by nature and art, that he was obliged, after some cannonading to very little purpose, to pursue his voyage.

BOURBON (Nicholas), a famous Latin poet in the 16th century, was a native of Vandeure near Langres, and the son of a wealthy man who was master of several forges. Margaret de Valois appointed him preceptor to her daughter Jane d'Albert of Navarre, the mother of king Henry IV. At length he retired to Conde, where he had a benefice, and died about the year 1550. He wrote eight books of Epigrams; and a poem on the forge, which he has intitled *Ferraria*. He had great knowledge of antiquity and of the Greek language. Erasmus praises his epigrams.

BOURBON (Nicholas), a celebrated Greek and Latin poet,

Bourbon
Bourchier.

poet, was nephew of the preceding. He taught rhetoric in several colleges of Paris; and the cardinal de Perron caused him to be nominated professor of eloquence in the Royal College: he was also canon of Langres, and one of the 40 of the French academy. At length he retired to the fathers of the oratory, where he died in 1644, aged 70. He is esteemed one of the greatest Latin poets France has produced. His poems were printed at Paris in 1630.

BOURBON-Lancy, a town of France, in the duchy of Burgundy, and in the Autunnois. It is remarkable for its castle and baths; and there is a large marble pavement, called the *great bath*, which is a work of the Romans. It is seated near the river Loire, in E. Long. 3. 46. N. Lat. 46. 37.

BOURBON L'Archambaud, a small town of France, remarkable for its baths, which are exceedingly hot. E. Long. 3. 28. N. Lat. 46. 35.

Family of BOURBON are the reigning princes in the kingdom of France. Henry IV. in 1589, though of the 10th generation, was the nearest heir; and succeeded Henry III. (the last of the Valois race), whose brother Francis II. married Mary Queen of Scots, and both died without issue. Louis XVI. is the 5th king of this family in succession. This family also mounted the throne of Spain in 1700, by Philip V. grandson to Louis XIV. which was the occasion of the long and bloody war that ended in the peace of Utrecht. A branch of the Spanish family likewise mounted the throne of the two Sicilies in 1734. These three branches entered into a treaty offensive and defensive in 1761, which goes by the name of the *family compact*.

BOURBONE-LE-BAINS, a town of France in Champagne, and in the Bassigni, famous for its hot baths. E. Long. 5. 45. N. Lat. 47. 54.

BOURBONNOIS, a province of France, with the title of a duchy; bounded on the north, by Nivernois and Berry; on the west, by Berry and a small part of upper Marche; on the south by Auvergne; and on the east, by Burgundy and Forez. It abounds in corn, fruits, pastures, wood, game, and wine. Its principal town is Moulins; and the rivers are the Loire, the Allier, and the Chur.

BOURBOURG, a town in French Flanders, whose fortifications are demolished. It is seated on a canal that goes to Dunkirk, in E. Long. 2. 15. N. Lat. 50. 55.

BOURCHIER (John), lord Bemars, grandson and heir of a lord of the same name, who was descended from Thomas of Woodstock, duke of Gloucester, and had been knight of the Garter, and constable of Windsor-castle, under Edward IV. Our lord John was created a knight of the Bath, at the marriage of the duke of York second son of Edward IV. and was first known by quelling an insurrection in Cornwall and Devonshire, raised by Michael Joseph, a blacksmith, in 1495; which recommended him to the favour of Henry VII. He was captain of the pioneers at the siege of Therouanne, under Henry VIII. by whom he was made chancellor of the exchequer for life, lieutenant of Calais and the Marches, appointed to conduct the lady Mary the king's sister into France on her marriage with Louis XII. and had the extraordinary happiness of continuing in favour with Henry VIII. for the space of 18 years. He died at Calais in 1532, aged 63. He translated, by king Henry's command, Froissart's Chro-

nicle; which was printed in 1523, by Richard Pinson, the scholar of Caxton, and the fifth on the list of English printers. His other works were a whimsical medley of translations from French, Spanish, and Italian novels, which seem to have been the mode then, as they were afterwards in the reign of Charles II. These were, The life of Sir Arthur, an Armorican knight; The famous exploits of Sir Hugh Bourdeaux; Marcus Aurelius; and, The castle of love. He composed also a book, of the duties of the inhabitants of Calais; and a comedy entitled *Ite in Vineam*, which is mentioned in none of our catalogues of English plays. Anthony Wood says it was usually acted at Calais after Vespers.

BOURDALOUE (Lewis), a celebrated preacher among the Jesuits, and one of the greatest orators France has produced, was born at Bourges, on the 20th of August 1632. After having preached at Provence, he, in 1699, went to Paris; and there met with such applause, that the king resolved to hear him; on which he was sent for to court, and frequently preached before Louis XIV. He assisted the sick, visited the prisoners and hospitals, and was very liberal in giving alms. He died at Paris on the 13th of May 1704. The best edition of his sermons is in octavo.

BOURDEAUX, an ancient, large, handsome, and rich town of France, capital of Guienne, an archbishop's see; has an university and an academy of arts and sciences. It is built in the form of a bow, of which the river Garonne is the string. This river is bordered by a large quay, and the water rises four yards at full tide, for which reason the largest vessels can come up to it very readily. The castle called the *Trumpet* is seated at the entrance of the quay, and the river runs round its walls. Most of the great streets lead to the quay. The town has 12 gates; and near another castle are fine walks under several rows of trees. The ancient city of Bourdeaux, though considerable in point of size, was ill built, badly paved, dangerous, without police or any of those municipal regulations indispensably requisite to render a city splendid or elegant. It has entirely changed its appearance within these last thirty years. The public edifices are very noble, and all the streets newly built are regular and handsome. The quays are four miles in length, and the river itself is considerably broader than the Thames at London bridge. On the opposite, a range of hills, covered with woods, vineyards, churches, and villas, extends beyond the view. Almost in the centre of the town is a fine equestrian statue in bronze erected to the late king in 1743, with the following inscription:

*Ludovico quindecimo,
Sæpe victori, semper pacificatori;
Suos omnes, quam latè regnum patet,
Paterno pectore gerenti;
Subrum in animis penitus habitanti.*

The beauty of the river Garonne, and the fertility of the adjoining country, were probably the causes which induced the Romans to lay the foundations of this city. The ruins of a very large amphitheatre yet remain, constructed under the emperor Gallienus; it is of brick, as are most of the edifices of that period, when the empire was verging to its fall, and the arts began rapidly to decline. During the irruptions of the barbarous nations, and particularly in those which the Normans repeatedly made, Bourdeaux was ravaged, burnt, and almost

most.

Bourdeaux most entirely destroyed. It only began to recover again under Henry II. of England, who having united it to the crown by his marriage with Eleanor of Aquitaine, rebuilt it, and made it a principal object of his policy, to restore the city again to the lustre from which it had fallen. The Black Prince received all Guienne, Gascony, and many inferiors provinces in full sovereignty from his father Edward III. He brought his royal captive, John king of France, to this city, after the battle of Poitiers in 1356; and held his court and residence here during eleven years. His exalted character, his uninterrupted series of good fortune, his victories, his modesty, his affability, and his munificence, drew strangers to Bourdeaux from every part of Europe; but all this splendor soon disappeared. He lived to experience the ingratitude of Pedro the Cruel, to whom he had restored the kingdom of Castile; he became a prey to distempers in the vigour of life; he saw his dominions reunited again in many of their branches to the crown of France, by Charles V.; he lost his eldest son Edward, a prince of the highest expectations; and at length, overcome with sorrow at this last affliction, he quitted Bourdeaux, and re-embarked for England, there to expire a memorable example of the hasty revolution of human greatness! In 1453, Charles VII. king of France, re-entered the city, and subjected the whole province of Guienne, which had been near three centuries under the English government. Conscious of the importance of such a conquest, he ordered the Chateau Trompette to be built to defend the passage of the river; and Louis the XIV. afterwards employed the celebrated Vauban to erect a new fortress in the modern style of military architecture, on the same spot.—Madame de Maintenon, whom fortune seemed to have chosen as the object of her extreme rigour and extreme bounty, was removed from the prisons of Niort in Poictou where she was born, with her father the Baron d'Aubigné, to this castle, where she used to play with the daughter of the turnkey, in the greatest indigence. Bourdeaux presents few remains of antiquity. The cathedral appears to be very old, and has suffered considerably from the effects of time. The unfortunate duke of Guienne, brother to Louis the XI. who was poisoned in 1473, lies buried before the high altar. The adjacent country, more peculiarly the *Pays de Medoc*, which produces the finest clarets, is exceedingly pleasant, and at the season of the vintage, forms one of the most delicious landscapes in the world. W. Long. 0. 39. N. Lat. 44. 50.

BOURDELOT (John), a learned French critic, who lived at the close of the 16th and beginning of the 17th centuries. He distinguished himself by writing notes on Lucian, Petronius, and Heliodorus; by an Universal History; Commentaries on Juvenal; a Treatise on the Etymology of French words; and by some other works which were never published.—There was also an abbe Bourdelot, his sister's son, who changed his name from Peter Michon to oblige his uncle. He was a celebrated physician at Paris, who gained great reputation by a Treatise on the Viper, and other works. He died in 1685.

BOURDINES, a town of the Austrian Netherlands, in the province of Namur. E. Long. 5. 0. N. Lat. 50. 35.

BOURDON (Sebastian), a famous painter, born at Montpellier, in 1619. He studied seven years at Rome; and acquired such reputation, that at his return to France he had the honour of being the first who was made rector of the academy of painting at Paris. He succeeded better in his landscapes than in his history-painting. His pieces are seldom finished; and those that are so, are not always the finest. He once laid a wager with a friend, that he should paint 12 heads after the life, and as big as the life, in one day. He won it; and these are said not to be the worst things he ever did. His most considerable pieces are, The gallery of M. de Bretonvilliers, in the isle of Notre Dame; and, The seven works of mercy, which he etched by himself. But the most esteemed of all his performances is, The martyrdom of St Peter, drawn for the church of Notre Dame: It is kept as one of the choicest rarities of that cathedral. Bourdon was a Calvinist; much valued and respected, however, in a Popish country, because his life and manners were good. We have also by this master a great number of etchings; which are executed in a bold, masterly style, and much more finished than those we generally meet with from the point of the painter. They are justly held in the highest estimation by the generality of collectors. He died in 1673, aged 54.

BOURDONE, in heraldry, the same with **POME**.

BOURG, the capital of the island of Cayenne, a French colony on the coast of Guiana, in South America; in W. Long. 52. 0. N. Lat. 5. 0.

Bourg-en-Bresse, a town of France, and capital of Bresse, in the province of Burgandy. It is seated on the river Resouffe, almost in the centre of Bresse, in E. Long. 4. 19. N. Lat. 46. 13.

Bourg-sur-Mer, a sea-port town of France in Guienne, and in the Bourdelois, with a tolerable good harbour: seated at the confluence of the rivers Dordogne and Garonne, in W. Long. 3. 35. N. Lat. 45. 0.

BOURGES, an ancient and large town of France, the capital of Berry, an archbishop's see, and a famous university. The archbishop assumes the title of *Patriarch of the Aquitains*, and enjoys the rights of primacy with regard to Albi. It is seated between two small rivers, the Evry and the Orron, upon a hill that has a gentle descent down to these rivers, by which it is almost surrounded, for there is but one avenue to it by land, which is that of Port Bourbonnoux. It stands upon a great deal of ground; but one part of it is without houses; and the rest is but thinly peopled with gentlemen, students, and ecclesiastics, the whole number of souls amounting only to about 1800. They have no manner of trade but for their own necessities. It is divided into the old and new town. The walls of the old are almost entire, and the new town is almost as large as the old. There are several churches, convents, and nunneries. The parish church, dedicated to St Stephen, is a fine old Gothic structure: it is seated on the highest part of the city, and on each side of the front are two handsome high towers. The new one, which is built in the room of one which fell down, is almost 200 feet high. Bourbon square is the largest in the city, where there was formerly an amphitheatre, and now a market. There is a fine walk from St Michael's-gate into the fields, and three alleys, formed by four ranks of trees, the middlemost of which is spacious; besides which, there is a very long mall. The university is famous.

Bourdon
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Bourges.

Bouget
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Bourgogne

mous for the study of the law. This city stands almost in the centre of France. E. Long. 2. 30. N. Lat. 47. 10.

BOUGET (Dom. John), an ingenious French antiquary, was born at the village of Beaumains near Falaise, in the diocese of Seez, in 1724. He was educated at the grammar-school at Caen, whence he was removed to that university, and pursued his studies with great diligence and success till 1745, when he became a Benedictine monk of the abbey of St Martin de Seez. Some time after this, he was appointed prior claustral of the said abbey, and continued six years in that office, when he was nominated prior of Tiron en Perche: whence being translated to the abbey of St Stephen at Caen, in the capacity of sub-prior, he managed the temporalities of that religious house during two years, as he did their spiritualities for one year longer; after which, according to the custom of the house, he resigned his office. His superiors, sensible of his merit and learning, removed him thence to the abbey of Bec, where he resided till 1764. He was elected an honorary member of the Society of Antiquaries of London, Jan. 10. 1765; in which year he returned to the abbey of St Stephen at Caen, where he continued to the time of his death. These honourable offices, to which he was promoted on account of his great abilities, enabled him not only to pursue his favourite study of the history and antiquities of some of the principal Benedictine abbeys in Normandy, but likewise gave him access to all their charters, deeds, register-books, &c. &c. These he examined with great care, and left behind him in MS. large and accurate accounts of the abbeys of St Peter de Jumieges, St Stephen, and the Holy Trinity at Caen (founded by William the Conqueror and his queen Matilda), and a very particular history of the abbey of Bec. These were all written in French. The "History of the Royal Abbey of Bec" (which he presented to Dr Ducarel in 1764) is only an abstract of his larger work. This ancient abbey (which hath produced several archbishops of Canterbury and other illustrious prelates of this kingdom) is frequently mentioned by our old historians. The death of our worthy Benedictine (which happened on new year's day 1776) was occasioned by his unfortunate neglect of a hurt he got in his leg by falling down two or three steps in going from the hall to the cloister of the abbey of St Stephen at Caen, being deceived by the ambiguous light of a glimmering lamp that was placed in that passage. He lived universally esteemed, and died sincerely regretted by all those who were acquainted with him; and was buried in the church of the said abbey, Jan. 3. 1776.

BOURGET, a town of Savoy, subject to the king of Sardinia, seated at the southern extremity of a lake of the same name. E. Long. 5. 55. N. Lat. 45. 45.

BOURGOGNE, or **BURGUNDY**, as we call it; a considerable province of France with the title of a duchy. It is 130 miles in length, and 75 in breadth. It is bounded on the east, by the Franche Comte; on the west, by Bourbonnois and Nivernois; on the south, by Lyonnois; and on the north by Champagne. It is very fertile in corn and fruit, and produces excellent wine. It is watered by the rivers Seine, Dehune, Bre-

bince, Armançon, Ouche, Souzon, Tille, and Saone. **Bourguignons** There are four mineral springs at Avoigny, Primeau, Bourbon-Lancy, and St Reine. The first are obscure, and the two last in high reputation. In the canton of Bresse, there are two subterranean lakes which often overflow in times of the greatest drought, and lay a large tract of ground under water: one of them has no apparent spring or opening; and yet in a dry season, it throws out water enough to overflow the meadow-land near it. The grottos or caves of Arcy are seated about 18 miles from Auxere, and over them is soil about 10 feet deep. The entrance into these cavities is 200 paces long, but narrow. There are arches which form several vaults, from whence drop clear water, which turns into a brilliant hard stone. Twenty paces from the entrance is a lake, which seems to be formed by that part of the water that will not petrify. The highest of these vaults is not above eight feet. About 80 paces from the entrance there is a kind of hall, with a coffee-coloured ceiling, wherein there are a thousand odd figures, which have a very agreeable effect. Dijon is the capital town.

BOURGUIGNONS, or **BURGUNDIANS**, one of the northern nations who over-ran the Roman empire, and settled in Gaul. They were of a great stature, and very warlike; for which reason the emperor Valentinian the Great engaged them in his service against the Germans. They lived in tents which were close to each other, that they might the more readily unite in arms on any unforeseen attack. These conjunctions of tents, they called *burghs*; and they were to them what towns are to us. Sidonius Apollinaris tells us, that they wore long hair, took great pleasure in singing, and were fond of praise for their vocal talents. He adds, that they ate great quantities; and anointed their hair with butter, deeming that unction very ornamental. Their crown was at first elective, and the authority of their kings expired with their success. They were not only accountable for their own misconduct, but likewise for the calamities of nature, and the caprice of fortune. They were deposed if they had lost a battle; if they succeeded ill in any enterprise: or if, in short, any great event had not corresponded with the hopes of the public. They were not more favourably treated in case of a bad harvest or vintage, or of any epidemical distemper had ravaged the state. At first they were governed by many kings, and *bendin* was the title of the royal dignity. But in later times they were subjected to one sovereign; and they grew humane and civilized, especially when Christianity was propagated in their country. Before that epocha, their religion was much the same with that of the other northern nations. They had many priests, the chief of whom was distinguished by the name of *sinistrus*. He was perpetual, and they paid him great respect and veneration.

BOURIGNON (Antonietta), a famous enthusiastic preacher and pretended prophetess, was born at Lille in 1616. At her birth she was so deformed, that it was debated some days in the family whether it was not proper to stifle her as a monster: but her deformity diminishing, she was spared; and afterwards obtained such a degree of beauty, that she had her admirers. From her childhood to her old age she had an extraordinary turn of mind. She set up for a reformer, and published a great number of books filled with very singular notions;

Bourignon
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Bouton
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• See the
article A-
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tions; the most remarkable of which are intitled *The light of the World*, and *The testimony of Truth*. She was an enemy to reason and common sense, which she maintained ought to give place to the illumination of divine faith; and asserted, that whenever any one was born again by embracing her doctrine, she felt the pains and throws of a woman in labour. Of her pretended visions and revelations we shall give one instance as a sample. In one of her ecstasies she saw Adam in the same form in which he appeared before his fall, and the manner in which he was capable of procreating other men, since he himself possessed in himself the principles of both sexes*. Nay she pretended it was told her that he had carried this procreating faculty so far as to produce the human nature of Jesus Christ. "The first man (says she) whom Adam brought forth without any concurrent assistance in his glorified state, was chosen by God to be the throne of the Divinity; the organ and instrument by which God would communicate himself externally to men: This is Christ the first born united to human nature, both God and man." Besides these and such like extravagancies, she had other forbidding qualities: her temper was morose and peevish, and she was extremely avaricious and greedy of amassing riches. She dressed like an hermit, and travelled to France, Holland, England, and Scotland. In the last she made a strong party, and some thousand sectarists, known by the name of *Bourignois*. She died at Faneker in the province of Frise, October 30th, 1680. Her works have been printed in 18 vols octavo.

BOURN, a town of Lincolnshire in England, seated in E. Long. 1. 17. N. Lat. 52. 40. It is a pretty large place, has a good market for corn and provisions, and is noted for the coronation of king Edmund.

BOURNE, or BURN, an appellation anciently given to all little brooks or rivulets, and still used in the same sense in Scotland and in the north of England.

BOURO, an island in the East Indian ocean, between the Moluccas and Celebes. It is well cultivated; and is now subject to the Dutch, who have built a fortress here. Some mountains in it are exceeding high, and the sea on one side is uncommonly deep. It produces nutmegs and cloves, as well as cocoa and banana trees; besides many vegetables introduced by the Dutch. It is about 50 miles in circumference. E. Long. 129. S. Lat. 4. 30.

BOUTANT, or ARCH-BOUTANT, in architecture, an arch, or part of an arch, abutting against the reins of a vault to prevent its giving way.

A Pillar *BOUTANT*, is a large chain or pile of stone, made to support a wall, terrace, or vault.

BOUTE, in the manege. A horse is called *bouté*, when his legs are in a straight line from the knee to the coronet: short-jointed horses are apt to be *bouté*, and on the other hand long-jointed horses are not.

BOUTS-RIMES, a popular term in the French poetry; signifying certain rhymes, disposed in order, and given to a poet together with a subject, to be filled up with verses ending in the same words, and the same order. The invention of the bouts-rimes is owing to one Du Lot, a poet, in the year 1649. In fixing the bouts, it is usual to choose such as seem the remotest, and have the least connection.

Some good authors fancy that these rhymes are of all others the easiest, that they assist the invention, and furnish the most new thoughts of all others. Sarasin has a poem on the defeat of the bouts-rimes. The academy of Lanternists at Tholouse have contributed towards keeping in countenance the bouts-rimes, by proposing each year a set of fourteen, to be filled up on the glories of the grand monarque: the victorious sonnet to be rewarded with a fine medal—An instance hereof may be given in the following one, filled up by P. Commire.

*Tout est grand dans le roi, l'aspect seul de son buste
Rend nos fiers ennemis plus froids que des glaçons.
Et Guillaume n'attend que le tems des moissons,
Pour se voir succomber sous un bras si robuste.
Qu'on ne nous vante plus les miracles d'Auguste;
Louis de bien regner lui feroit des leçons:
Horace en vain l'egale aux dieux dans ses chansons:
Moins que mon heros il étoit sage et juste, &c.*

BOUTON, an island in the East Indian ocean, about 12 miles distant from the south-east part of the island of Macassar, or Celebes. The inhabitants are small, but well shaped, and of a dark olive complexion. The principal town is Callasjung, which is about a mile from the sea, on the top of a small hill, and round it a stone wall. The houses are not built upon the ground, but on posts. The religion of the inhabitants is Mahometanism. E. Long. 122. 30. S. Lat. 4. 30.

BOUVILLON, a city of Luxemburg in the Austrian Netherlands, situated in E. Long. 5. 0. N. Lat. 49. 55.

BOW (*Arcus*), a weapon of offence made of wood, horn, or other elastic matter, which, after being strongly bent, by means of a string fastened to its two ends, in returning to its natural state throws out an arrow with great force. It is also called the *long-bow*, by way of distinction from the cross-bow or arbalest.

The bow is the most ancient, and the most universal of all weapons. It has been found to obtain among the most barbarous and remote people, and who had the least communication with the rest of mankind.

The use of the bow and arrows was first abolished in France under Louis XI. in 1481, and in their place was introduced the Swiss arms, that is, the halbard, pike, and broad-sword. The long-bow was formerly in great vogue in England; most of our victories in France were acquired by it; and many laws were made to regulate and encourage its use. The parliament under Henry VIII. complain "of the disuse of the long-bow, heretofore the safe-guard and defence of this kingdom, and the dread and terror of its enemies." 33; Hen. VIII. cap. 6.

The art of using bows is called *archery*, and those practised therein, *archers*, or *bowmen*. See ARCHERY.

The strength of a bow may be calculated on this principle, that its spring, *i. e.* the power whereby it restores itself to its natural position, is always proportionate to the distance or space it is removed therefrom.

The most barbarous nations often excel in the fabric of the particular things which they have the greatest necessity for in the common offices of life. The Laplanders, who support themselves almost entirely by hunting, have an art of making bows, which we, in these improved parts of the world, have never arrived at.

Their

Bow.

Their bow is made of two pieces of tough and strong wood, shaved down to the same size, and flatted on each side; the two flat sides of the pieces are brought closely and evenly together, and then joined by means of a glue made of the skins of pearch, which they have in great plenty, and of which they make a glue superior in strength to any which we have. The two pieces, when once united in this manner, will never separate, and the bow is of much more force to expel the arrow, than it could possibly have been under the same dimensions if made of only one piece.

Among the ancients, the bow-string, called *τριχορdis*, was made of horses hair, and hence also called *ιππεια*; though Homer's bow-strings are frequently made of hides cut into small thongs; whence *τοξα βοια*. The uppermost part of the bow, to which the string was fastened, was called *κορυνη*, being commonly made of gold, and the last thing towards finishing the bow. The Grecian bows were frequently beautified with gold or silver; whence we have mention of *aurei arcus*; and Apollo is called *Αργυροτοξος*. But the matter of which they were ordinarily composed, seems to have been wood; though they were anciently, Scythian-like, made of horn, as appears from that of Pandarus in Homer, *Iliad*. *δ*. v. 105.

The invention of the bow is usually ascribed to Apollo, and was communicated to the primitive inhabitants of Crete, who are said to have been the first of mortals who understood the use of bows and arrows. And hence, even in latter ages, the Cretan bows were famous, and preferred by the Greeks to all others. Some, however, rather choose to honour Perseus, the son of Perseus, with the invention of the bow; while others ascribe it to Scythes, son of Jupiter, and progenitor to the Scythians, who were excellent at this art, and by many reputed the first masters of it. From them it was derived to the Grecians, some of whose ancient nobility were instructed by the Scythians in the use of the bow, which in those days passed for a most princely education. It was first introduced into the Roman army in the second Punic war.

The Indians still retain the bow. In the repository of the Royal Society we see a West Indian bow two yards long.

The Scythian bow was famous for its incurvation, which distinguished it from the bows of Greece and other nations; being so great as to form an half-moon or semicircle: whence the shepherd in Athenæus, being to describe the letters in Theseus's name, and expressing each of them by some apposite resemblance, compares the third to the Scythian bow; meaning not the more modern character *z*, but the ancient *C*, which is semicircular, and bears the third place in *ΘΗΕΥC*.

Cross-Bow, is also called *arbalest* or *arbalet*; which word is derived from *arbalista*, i. e. *arcubalista*, "a bow with a sling." The arbalet consists of a steel-bow, set in a shaft of wood, furnished with a string and a trigger; and is bent with a piece of iron fitted for that purpose. It serves to throw bullets, large arrows, darts, &c. The ancients had large machines for throwing many arrows at once, called *arbalets* or *balista*.

Bow, is also an instrument used at sea, for taking the sun's altitude; consisting of a large arch of 90° graduated, a skank or staff, a side vane, a sight vane, and an horizon vane. It is now out of use.

Bow, among builders, a beam of wood or brass, with threw long screws that direct a lathe of wood or steel to any arch; chiefly used in drawing draughts of ships and projections of the sphere, or wherever it is requisite to draw large arches.

Bow, in music, a small machine, which, being drawn over the strings of a musical instrument, makes it resound. It is composed of a small stick, to which are fastened 80 or 100 horse-hairs, and a screw which serves to give these hairs a proper tension. In order that the bow may touch the strings briskly, it is usual to rub the hairs with rosin. The ancients do not appear to have been acquainted with bows of hair: in lieu hereof they touched their instruments with a plectrum; over which our bows have great advantage, for giving long and short sounds, and other modifications which a plectrum cannot produce.

Bow, among artificers, an instrument so called from its figure; in use among gunsmiths, locksmiths, watch-makers, &c. for making a drill go. Among turners it is the name of that pole fixed to the ceiling, to which they fasten the cord that whirls round the piece to be turned.

Bow, a town of Devonshire in England, 188 miles west from London, and a little to the west of Crediton, has a weekly market, and two fairs in the year. The court of the duchy of Lancaster is commonly kept here.

Bows of a Saddle, are two pieces of wood laid arch-wise to receive the upper part of a horse's back, to give the saddle its due form, and to keep it tight.

The fore-bow which sustains the pommel, is composed of the withers, the breasts, the points or toes, and the corking.

The hind-bow bears the trosequin or quilted roll. The bows are covered with sinews, that is with bulls pizzles beaten, and so run all over the bows to make them stronger. Then they are strengthened with bands of iron to keep them tight: and on the lower side are nailed on the saddle straps, with which they make fast the girths.

Bow, Epauale, in ship-building, the rounding part of a ship's side forward, beginning at the place where the planks arch inwards; and terminated where they close, at the stem or prow. It is proved by a variety of experiments, that a ship with a narrow bow is much better calculated for sailing swiftly, than one with a broad bow; but is not so well fitted for a high sea, into which she always *pitches* or plunges her fore-part very deep, for want of sufficient breadth to repel the volume of water which she so easily divides in her fall. The former of these is called by seamen a *lean*, and the other a *bluff*, bow. "The bow which meets with the least resistance in a direct course, not only meets with the least resistance in oblique courses, but also has the additional property of driving the least to leeward; which is a double advantage gained by forming the bow so as to give it that figure which will be least resisted in moving through any medium*."

On the Bow, in navigation, an arch of the horizon comprehended between some distant object and that point of the compass which is right a-head, or to which the ship's stern is directed. This phrase is equally applicable when the object is beheld from the ship, or discovered by trigonometrical calculation: As, we saw a

Bow.

* Bouguer's
Traité de
Navire.

flect

Bow
||
Bower.

fleet at day-break bearing three points on the starboard-bow: that is, three points from that part of the horizon which is right a-head, towards the right-hand. See the article BEARING.

Bow-dye, a kind of scarlet red, superior to madder; but inferior to the true scarlet grain for fixedness and duration. It was brought into England, and first practised at the village of Bow, near London, by Kephler, a Dutchman, in the year 1643.

Bow-grace, in the sea-language, a frame or composition of old ropes or junks of cables, used to be laid out at the bows, stems, and sides of ships, to preserve them from great flakes of ice, chiefly when they sail in high north or south latitudes.

Bow-net, or *Bow-wheel*, an engine for catching fish, chiefly lobsters and craw-fish, made of two round wicker baskets, pointed at the end, one of which is thrust into the other; at the mouth is a little rim, four or five inches broad, somewhat bent inwards. It is also used for catching sparrows.

Bow-Legged, or *Bandy-legged*. Some children are bow-legged from their birth; others become so from setting them on their feet too early. The tibia of some is crooked; the knees of others are distorted; from a fault in the ankle, the feet of some are turned inwards. These are called *vari*; and in others, who are called *valgi*, they are turned outwards. The best method of preventing these disorders in weakly children is to exercise them duly, but not violently, by dancing or tossing them about in one's arms; and not setting them much upon their feet, at least not without properly supporting them: if the disorder attends at the birth, or increases after it is begun, apply emollients, then apply boots of strong leather, wood, &c. so as gradually to dispose the crooked legs to a proper form; or other instruments may be used instead of boots, which, when not too costly, are usually to be preferred. Slighter instances of these disorders yield to careful nursing, without instruments.

Bow-Line, or *Bowling*, a rope fastened near the middle of the leech, or perpendicular edge of the square sails, by three or four subordinate parts called *bridles*. It is only used when the wind is so unfavourable that the sails must be all braced sideways, or close-hauled to the wind: in this situation the bow-lines are employed to keep the weather or windward edges of the principal sails tight, forward, and steady, without which they would always be shivering, and rendered incapable of service. To *check* the bow-line is to slacken it, when the wind becomes large.

Bow-Pieces, are the pieces of ordnance at the bow of a ship.

Rain-Bow. See *RAIN-Bow*.

Bow-Bearer, an inferior officer of the forest, who is sworn to make inquisition of all trespasses against vert or venison, and to attach offenders.

BOWELS, in anatomy, the same with intestines. See ANATOMY, n° 93.

BOWER, in gardening, a place under covert of trees, differing only from an arbour, as being round or square, and made with a kind of dome or ceiling at top; whereas the arbour is always built long and arched.

BOWER, in the sea-language, the name of an anchor

carried at the bow of a ship. There are generally two bowers, called *first* and *second*, *great* and *little*, or *best* and *small* bower. See ANCHOR.

BOWESS, or BOWER, in falconry; a young hawk, when she draws any thing out of her nest, and covets to clamber on the boughs.

BOWL, denotes either a ball of wood, for the use of bowling; or a vessel of capacity, wherein to hold liquors.

BOWLDER-STONES, small stones of a roundish figure, and no determinate size, found on the sea-shore, and on banks or rather channels of rivers.

BOWLING, the art of playing at bowls.—This game is practised either in open places, as bares and bowling-greens, or in close-bowling-alleys.

The skill of bowling depends much on a knowledge of the ground, and the right choice of a bowl suitable to it: for close alleys, the flat bowl; for green swards plain and level, the bowl as round as a ball is preferred.

The terms used in bowling are, to *bowl wide*, which is when the bias does not hold, or is not strong enough; *narrow*, when it is too strong, or holds too much; *finely bowled*, is when the ground is well chosen, and the bowl passes near the block, even though it goes much beyond it: *bowling through*, or a *yard over*, is done in order to move the block; an *over bowl*, that which goes beyond it; a *bowl laid at hand*, is that put down within the gamster's reach, to be in the way of the next bowler, and hinder his having the advantage of the best ground; *bowling at length*, neither bowling through nor short; a *dead length*, a just or exact one; *throwing* or *flinging*, is discharging a bowl with a strength purposely too great for a length, in order to carry off either the block or some near bowl; *bowl-room*, or *missing-wood*, is when a bowl has free passage, without striking on any other; *get off*, is when a bowl being narrow, is wanted to be wider; *bowl best at block*, that nearest the block: *drawing a cast or bowl*, is to win it by bowling nearer, without stirring either the bowl or block; a bowl is said to *rub*, when it meets with some obstacle in the ground, which retards its motion, and weakens its force; *it is gone*, when far beyond the block. *Block* signifies a little bowl laid for a mark, also called a *jack*. *Mark*, is a proper bowling distance, not under so many yards; and being at least a yard and a half from the edge of the green. *Ground*, a bag or handkerchief laid down to mark where a bowl is to go. *Lead*, the advantage of throwing the block, and bowling first. *Cast*, is one best bowl at an end. *End*, a hit, or when all the bowls are out. The *game*, or *up*, is five casts or best bowls.

BOWLING-Green, in gardening, a kind of parterre in a grove, laid with fine turf, requiring to be frequently mowed, laid out in compartments of divers figures, with dwarf-trees and other decorations. Bowling-greens are of English origin, but have been adopted by the French and Italians, who have them only for ornament; being unacquainted with or not fancying the exercise, on account of which they were first made in England.

BOWLING-Bridles, are the ropes by which the bow-line is fastened to the leech of the sail.

BOWSE, in the sea-language, signifies as much as

Bowess
||
Bowse.

Bowsprit, to hale or pull. Thus *bowing upon a tack*, is hailing upon a tack. *Bowse away*, that is, Pull away all together.

BOWSPRIT, or **BOLTSPRIT**, a kind of mast, resting slopewise on the head of the main stern, and having its lower end fastened to the partners of the fore-mast, and farther supported by the fore-stay. It carries the sprit-sail, sprit-top-sail, and jack-staff; and its length is usually the same with that of the fore-mast.

BOWYER (William), the most learned printer of his age, was born at White Friars in London. December 17. 1699. His father, whose name also was William, had been eminent in the same profession; and his maternal grandfather (Icabod Dawks) was employed in printing the celebrated Polyglott bible of bishop Walton. At a proper age, he was placed for grammatical education under the care of Mr Ambrose Bonwicke, a nonjuring clergyman of known piety and learning, who then lived at Headly, near Leatherhead in Surry. Here Mr Bowyer made great advances in literature, and a firm attachment commenced betwixt him and his master. On the 30th of January 1713, the whole property of the elder Mr Bowyer was destroyed by fire; on which occasion Mr Bonwicke generously undertook the education of his pupil for one year. In 1716, young Mr Bowyer was admitted a sizar at St John's college, Cambridge, where Dr Robert Jenkin was at that time master. He continued at the college of Cambridge under the tuition of the reverend Dr John Newcombe till June 1722, during which period he probably took his degree of Bachelor of Arts; and it appears that he was desirous of obtaining a fellowship, though it is not certain that he ever stood a candidate for that honour. Soon after this he had an opportunity of repaying the kindness which Mr Bonwicke had shown him, by officiating some time after his death in the capacity of a schoolmaster for the benefit of his family.

Mr Bowyer now entered into the printing-business along with his father. One of the first books which received the benefit of his correction was the complete edition of Selden in three volumes folio by Dr David Wilkins. This edition was begun in 1722, and finished in 1726; and Mr Bowyer's great attention to it appeared in his drawing up an epitome of Selden *de Synedruiis*, as he read the proof-sheets. In 1727, he drew up an excellent sketch of William Baxter's Glossary of the Roman Antiquities. This was called "A view of a book intitled *Reliquiae Baxterianae*. In a letter to a friend." A single sheet 8vo. By this first public proof of Mr Bowyer's abilities, Dr Wotton and Mr Clarke were highly pleased; but as it was never published, and very few copies printed, it is very seldom found with the glossary. In 1727 Mr Bowyer lost his mother; on which occasion he received a letter of consolation from Mr Chishull the learned editor of the *Antiquitates Asiaticae*. In October 1728 he married Miss Ann Prudom, his mother's niece, a very accomplished lady, by whom he had two sons, William and Thomas; the former of whom died an infant, and the latter survived his father. In 1729 Mr Bowyer published a curious treatise, intitled, "A Pattern for young Students in the University; set forth in the Life of Ambrose Bonwicke, some time scholar of St John's College, Cambridge:" but though this treatise

was generally ascribed to Mr Bowyer, it was in reality the production of Mr Ambrose Bonwicke the elder. About this time it appears, that Mr Bowyer had written a pamphlet against the Separatists, though neither the title nor the occasion of it are now remembered. The same year, through the friendship of the Right Hon. Arthur Onslow, he was appointed printer of the Votes of the House of Commons; which office he held, under three successive speakers, for near fifty years. In 1731 Mr Bowyer published, and, it is believed, translated Voltaire's Life of Charles XII. This year also his wife died; on which occasion his friends Mr Clarke and Mr Chishull wrote him very affectionate and Christian letters. He remained a widower till 1747, when he married a very benevolent and worthy woman, Mrs Elizabeth Bill, by whom he had no children. In 1733 he published a piece in two sheets 4to, intitled, "The Beau and the Academic;" being a translation from a Latin poem recited that year at the Sheldonian theatre; and in 1736 he was admitted into the Society of Antiquarians, where he became an active and useful member. In 1737 Mr Bowyer lost his father; and on this occasion Mr Clarke again addressed to him a letter of consolation. In 1742 our author published a translation of Trapp's Latin Lectures on Poetry, in which he was assisted by Mr Clarke, though the latter had a contemptible opinion of the performance.

In 1749, Mr Bowyer, along with Dr Burton, was virulently attacked by Dr King in a piece intitled *Elogium fanae inferniens Jacci Etonensis sive Gigantis*; or, "The praises of Jack Eaton, commonly called *Jack the Giant*."—This abuse was probably occasioned by Mr Bowyer's having hinted in conversation some doubts concerning the Doctor's skill in Latin. Our author drew up some strictures in his own defence, which he intended to insert at the conclusion of a preface to Montesquieu's *Reflections*; but by Dr Clarke's advice they were omitted. In 1750, a prefatory critical dissertation and some notes were annexed by our author to Kuster's Treatise *De usu verborum mediocrium*; a new edition of which, with farther improvements, appeared in 1773. He wrote likewise about the same time a Latin preface to Leedes's *Veteres poeta citati*, &c.—Being soon after employed to print an edition of Col. Bladen's translation of Cæsar's Commentaries, that work received considerable improvements from Mr Bowyer's hands, with the addition of such notes in it as are signed **TYPOGR.** In the subsequent editions of this work, though printed by another person during our author's lifetime, the same signature, though contrary to decorum, and even to justice, was still retained. In 1751, he wrote a long preface to Montesquieu's "Reflections on the rise and fall of the Roman Empire;" translated the dialogue between Sylla and Socrates; made several corrections to the work from the Baron's "Spirit of Laws;" and improved it with his own notes. A new edition, with many new notes, was printed in 1759. In 1751 he also published the first translation that ever was made of Rousseau's paradoxical oration, which gained the prize at the academy of Dijon in 1750; and which first announced that singular genius to the attention and admiration of Europe. On the publication of the third edition of Lord Orrery's "Remarks on the Life and Writings of Dr Swift," in

Bowyer. 1752, Mr Bowyer wrote and printed, but never published, "Two Letters from Dr Bentley in the Shades below, to Lord Orrery in a Land of thick darkness." The notes signed B, in the ninth quarto volume of Swift's works, are extracted from these Letters. In 1753, he endeavoured to allay the ferment occasioned by the Jew bill; with which view he published, in quarto, "Remarks on the speech made in common-council, on the bill for permitting persons professing the Jewish religion to be naturalized, so far as prophecies are supposed to be affected by it." This little tract was written with spirit, and well received by those who were superior to narrow prejudices. Its design was to show, that whatever political reasons might be alleged against the bill, Christianity was in no danger of being prejudiced by the intended protection promised to the Jews. The same year some of Mr Bowyer's notes were annexed to Bishop Claton's translation of "A Journal from Grand Cairo to mount Sinai and back again."—In 1754, Mr Bowyer, with a view of lessening his fatigue, entered into partnership with a relation; but some disagreement arising, the connection was dissolved in three years. On the death of Mr Richardson in 1761, Mr Bowyer succeeded him as printer to the Royal Society, through the favour of the late Earl of Macclesfield; and, under the friendship of five successive presidents, enjoyed that office till his death.

In 1763, Mr Bowyer published an excellent edition of the Greek Testament, in two vols 12mo. It appeared under the following title: *Novum Testamentum Græcum; ad fidem Græcorum solum Codicum MSS. nunc primum impressum, ad stipulante Joanne Jacobo Wettstenio, juxta Sectiones Jo. Alberti Bengelii divisum; et nova interpretatione sæpius illustratum. Accessere in altero volumine, Emendationes conjecturales virorum doctorum undecunque collectæ.* This sold with great rapidity: the Conjectural Emendations were well received by the learned, and are thought to be a valuable work. The president and fellows of Harvard college in Cambridge expressed their approbation of this edition in very high terms. In a letter to Mr Bowyer, written in the year 1767, "This work (say they), though small in bulk, we esteem as a rich treasure of sacred learning, and of more value than many large volumes of the commentators." A second edition of the Conjectures on the New Testament, with very considerable enlargements, was separately published, in one vol. 8vo, in 1772. Bishop Warburton having censured a passage in the former edition, Mr Bowyer sent him a copy of this book, with a conciliatory letter. Dr Warburton's Divine Legation had received very considerable advantage from Mr Bowyer's corrections; and this even in an edition which was necessarily given to another press. In 1761 he was employed to print his Lordship's Doctrine of Grace. A second edition being soon wanted, and Mr Bowyer not having been intrusted with the care of it, he prepared a series of letters to the bishop in his own defence; of which, together with a few he had formerly received from that great writer, he afterwards printed *twelve copies*, of which *ten* have since been destroyed. However, there is the best authority for asserting, that notwithstanding any little altercations which happened, Dr Warburton always retained a sincere regard for our au-

thor. In 1765, at the request of Thomas Hollis, Esq; Mr Bowyer wrote a short Latin preface to Dr Wallis's *Grammatica Lingue Anglicane*. He wrote also a large English preface for the same work, which, however, still remains unprinted. In 1766 he entered into partnership with Mr Nichols, who had been trained by him to the profession, and had for several years assisted him in the management of his business. The same year, Mr Bowyer wrote an excellent Latin preface to *Joannis Harduini, Jesuitæ, ad Censuram Scriptorum veterum Prolegomena. Juxta Autographum*. In 1767 he was appointed to print the Journals of the House of Lords and the Rolls of Parliament. This year he printed Mr Clarke's excellent and learned work on "The Connection of the Roman, Saxon, and English Coins;" and wrote some notes upon it, which are interspersed throughout the volume with those of the author. Part of the Dissertation on the Roman festerce was likewise Mr Bowyer's production; and the index, which is an uncommonly good one, was drawn up by him entirely.

In January 1771 Mr Bowyer lost his second wife, and again received a letter of consolation from his old friend Mr Clarke, who had sent him one almost forty years before on a similar occasion. In the Philosophical Transactions for this year was printed a very ingenious "Inquiry into the Value of the ancient Greek and Roman Money," by the late Matthew Raper, Esq. But his opinions not coinciding with those of Mr Bowyer, he printed a small pamphlet, intitled, "Remarks, occasioned by a late Dissertation on the Greek and Roman money." In 1773 three little tracts were published by him, under the title of "Select Discourses. 1. Of the correspondence of the Hebrew months with the Julian, from the Latin of Professor Michaelis. 2. Of the Sabbatical years, from the same. 3. Of the years of jubilee, from an anonymous writer in Masson's *Histoire Critique de la Republique des Lettres*." In 1774 he corrected a new edition of Schrevelius's Greek Lexicon; to which he has added a number of words, distinguished by an asterisk, which he himself had collected in the course of his studies. Considerable additions, still in manuscript, were made by him to the lexicons of Hederic and Buxtorf, the Latin ones of Faber and Littleton, and the English Dictionary of Bailey; and he left behind him many other proofs of his critical skill in the learned languages. In 1774 was published, "The Origin of printing, in two essays. 1. The substance of Dr Middleton's Dissertation on the Origin of Printing in England. 2. Mr Meerman's Account of the Invention of the Art at Haarlem, and its progress to Mantz, with occasional Remarks, and an Appendix." The original idea of this valuable tract was Mr Bowyer's, but it was completed by Mr Nichols.

Although our author, during the last ten years of his life, had been afflicted with the palsy and stone, he not only preserved a remarkable cheerfulness of temper, but was enabled to support the labour of almost incessant reading; and he regularly corrected the learned works, especially the Greek books, which came from his press. This he continued to do till within a few weeks of his death, which happened in November 1777, when he had nearly completed his 78th year.

Bowyers
||
Boxing.

For more than half a century Mr Bowyer was unrivalled as a learned printer; and many of the most masterly productions of this kindom have come from his press. To his literary and professional abilities he added an excellent moral character; and he was particularly distinguished by his inflexible probity, and an uncommon alacrity in relieving the necessitous.

BOWYERS, artificers whose business is to make bows: in which sense, bowyers stand distinguished from fletchers, who made arrows.

The bowyers company in London was incorporated in 1620: and consists of a master, two wardens, twelve assistants, and 30 on the livery. See ARCHERY.

BOX, in its most common acceptation, denotes a small chest or coffer for holding things.

Dice-Box, a narrow deep cornet, channelled within, wherein the dice are shaken and thrown. This answers to what the Romans called *fritillus*; whence, *crepitantes fritilli*; and, in Seneca, *resonante fritillo*. The same author uses also *concutere fritillum*, figuratively, for playing.—Besides the *fritillus*, the Romans, for greater security, had another kind of dice-box called *pyrgus*, πυργος, and sometimes *turricula*. It was placed immoveable in the middle of the table, being perforated or open at both ends, and likewise channelled within; over the top was placed a kind of funnel, into which the dice were cast out upon the *fritillus*; whence descending, they fell through the bottom on the table; by which all practising on them with the fingers was effectually prevented. For want of some contrivance of this kind, our sharpers have opportunities of playing divers tricks with the box, as palming, topping, slabbing, &c.

Box, is also used for an uncertain quantity or measure: thus a box of quicksilver contains from one to two hundred weight; a box of prunellas only 14 pounds; a box of rings for keys, two grofs, &c.

Box-Tree, in botany. See BUXUS.

African-Box. See MYRSINE.

BOXERS, a kind of *athleta*, who combat or contend for victory with their fists. Boxers amount to the same with what among the Romans were called *pugiles*. The ancient boxers battled with great force and fury, insomuch as to dash out each others teeth, break bones, and often kill each other. The strange disfigurements these boxers underwent were such that they frequently could not be known, and rendered them the subject of many railleries. In the Greek anthology there are four epigrams of the poet Lucilius, and one of Lucian, wherein their disfigurements are pleasantly enough exposed. See BOXING.

BOXHORNIIUS (Marc Zuerius), a learned critic born at Bergen-op-Zoom in 1612, was professor of eloquence at Leyden, and at length of politics and history in the room of Heinsius. He published, 1. *Theatrum urbium Hollandiae*. 2. *Scriptores historiae Augustae, cum notis*. 3. *Poetae satyrici minores, cum comment.* 4. Notes on Justin, Tacitus; and a great number of other works. He died in 1653, aged 41.

BOXING, the exercise of fighting with the fists, either naked or with a stone or leaden ball grasped in them: in which sense, boxing coincides with the *pugilatus* of the Romans, and what on our amphitheatres is sometimes called trial of manhood. When the champions had *σφαίραι*, or balls, whether of lead or

stone, it was properly denominated *σφαίρομαχία*. The ancient boxing differed from the *pugna castuum*, in which the combatants had leathern thongs on their hands, and balls to offend their antagonists; though this distinction is frequently overlooked, and fighting with the *castus* ranked as a part of the business of *pugiles*. We may distinguish three species of boxing: viz. where both the head and hands were naked; where the hands were armed, and the head naked; and where the head was covered with a kind of cap called *amphotides*, and the hands also furnished with the *castus*.

Boxing is an ancient exercise, having been in use in the heroic ages. Those who prepared themselves for it, used all the means that could be contrived to render themselves fat and fleshy, that they might be better able to endure blows: whence corpulent men or women were usually called *pugiles*, according to Terence: *Siqua est habitior paulo, pugilem esse aiunt*.

In modern times this art has been in a manner appropriated by the English. About half a century ago it formed as regular an exhibition as we now see at any of the places of public amusement, the theatres alone excepted. It was encouraged by the first ranks of the nobility, patronised by the first subject in the realm, and tolerated by the magistrates. Before the establishment of Broughton's amphitheatre, a booth was erected at Tottenham Court, in which the proprietor, Mr George Taylor, invited the professors of the art to display their skill, and the public to be present at its exhibition. The bruisers then had the reward due to their prowess, in a division of the entrance-money, which sometimes was 100 l. or 150 l. The general mode of sharing was for two-thirds to go to the winning champion, while the remaining third was the right of the loser; though sometimes by an express agreement of the parties, the conqueror and the vanquished shared alike. The nobility and gentry having complained of the inconveniences sustained at Taylor's Booth, prevailed on Mr Broughton, who was then rising into note as the first bruiser in London, to build a place better adapted for such exhibitions. This was accordingly done in 1742, principally by subscription, behind Oxford-road. The building was called Broughton's New Amphitheatre; and, besides the stage for the combatants, had seats corresponding to the boxes, pit, and galleries, much in the same manner with those at Astley's. After a course of years, however, these exhibitions became gradually less patronised and frequented, owing probably to the refinement of our manners. Lately, indeed, they seemed to be revived, and for some time considerably engaged the attention of the public; but a fatal issue which attended one of them, brought the practice again into disrepute. One of the combatants was killed on the spot. His royal highness the Prince of Wales was present, and declared that he would have some settlement made on the nearest relation of the deceased, but that on account of the dreadful example he had then witnessed he would never more either see or patronise another stage-fight.

BOXING, among sailors, is used to denote the rehearsing the several points of the compass in their proper order.

BOXING is also used for the tapping of a tree to make

Boxing.

Boxtehide make it yield its juice. The boxing of maple is performed by making an hole with an ax or chissel into the side of the tree about a foot from the ground; out of it flows a liquor of which sugar is made.

BOXTEHUDE, a town of Germany, in the circle of Lower Saxony, subject to the Danes. It is seated on the rivulet Esse, which falls into the Elbe, in E. Long. 9. 35. N. Lat. 53. 40.

BOXTEL, a town in Dutch Brabant, with sluices seated on the river Bommel. E. Long. 5. 15. N. Lat. 51. 30.

BOYAR, a term used for a grandee of Russia and Transylvania. Becman says, that the boyars are the upper nobility; and adds, that the Czar of Muscovy, in his diplomas, names the boyars before the waywodes. See **WAYWODE**.

BOYAU, in fortification, a ditch covered with a parapet, which serves as a communication between two trenches. It runs parallel to the works of the body of the place; and serves as a line of contravallation, not only to hinder the sallies of the besieged, but also to secure the manners. But when it is a particular cut that runs from the trenches to cover some spot of ground, it is drawn so as not to be enfiladed or scoured by the shot from the town.

BOYD (Mark Alexander), an extraordinary genius, was son of Robert Boyd, who was eldest son of Adam Boyd of Pinkhill, brother to Lord Boyd. He was born in Galloway on the 13th of January 1562, and came into the world with teeth. He learned the rudiments of the Latin and Greek languages at Glasgow under two grammarians; but was of so high and untractable a spirit, that they despaired of ever making him a scholar. Having quarrelled with his masters, he beat them both, burnt his books, and forswore learning. While he was yet a youth, he followed the court, and did his utmost to push his interest there; but the fervour of his temper soon precipitated him into quarrels, from which he came off with honour and safety, though frequently at the hazard of his life. He, with the approbation of his friends, went to serve in the French army, and carried his little patrimony with him, which he soon dissipated at play. He was shortly after roused by that emulation which is natural to great minds, and applied himself to letters with unremitted ardour, till he became one of the most consummate scholars of his age. He is said to have translated Cæsar's Commentaries into Greek in the style of Herodotus, and to have written many Latin poems which were little inferior to the first productions of the Augustan age. He also left several manuscripts on philological, political, and historical subjects, in Latin and French, which languages were as familiar to him as his native tongue. He could with facility dictate to three amanuenses at the same time, in different languages, and on different subjects. He was also one of the best Scottish poets of the age. To all this we must add, that his personal beauty and accomplishments were equal to his mental superiority. He died at Pinkhill in Scotland, in 1601. The following works, which are all that have been printed, were published in *Deliciæ Poetarum Scotorum*; Amstel. 1637, 12mo. 1. *Epigrammata*, lib. ii. 2. *Heroidum Epistolæ* XIV. lib. i. 3. *Hymni* XIV.

BOYER (Abel), a well-known glossographer and historiographer, born at Castres in France, in 1664.

Upon the revocation of the edict of Nantz, he went first to Geneva, then to Franeker, where he finished his studies; and came finally to England, where he applied himself so closely to the study of the English language, and made so great a proficiency therein, that he became an author of considerable note in it, being employed in the writing of several periodical and political works. He was for many years concerned in, and had the principal management of, a newspaper called the *Post-boy*. He likewise published a monthly work, intitled, the *Political state of Great Britain*. He wrote a life of queen Anne in folio, which is esteemed a very good chronicle of that period of the English history. But what has rendered him the most known, and established his name to the latest posterity, are the excellent Dictionary and Grammar of the French language, which he compiled, and which have been and still are reckoned the best in their kind. He also wrote, or rather translated from the French of M. de Racine, the tragedy of Iphigenia, which he published under the title of *The Victim*. It was performed with success at the theatre of Drury-lane, and is far from being a bad play. Nor can there perhaps be a stronger instance of the abilities of its author, than success in such an attempt; since writing with any degree of correctness or elegance, even in prose, in a language which we were not born to the speaking of, is an excellence not very frequently attained; but to proceed so far in the perfection of it as to be even sufferable in poetry, and more especially in that of the Drama, in which the diction and manner of expression require a peculiar dignity and force, and in a language so difficult to attain the perfect command of as the English, is what has been very seldom accomplished. He died in 1729.

BOYER, in navigation, a kind of Flemish sloop, or small vessel of burden, having a boltsprit, a cattle at each end, and a tall mast; chiefly fit for the navigation of rivers, and in many of its parts resembling a smack.

BOYES, idolatrous priests among the savages of Florida. Every priest attends a particular idol, and the natives address themselves to the priest of that idol to which they intend to pay their devotion. The idol is invoked in hymns, and his usual offering is the smoke of tobacco.

BOYLE (Richard), one of the greatest statesmen of the last century, and generally styled the *Great earl of Corke*, was the youngest son of Mr Roger Boyle, and was born at Canterbury, on the 3d of October, 1566. He studied at Bennet college, Cambridge; afterwards became a student in the Middle Temple. Having lost his father and mother, and being unable to support himself in the prosecution of his studies, he became clerk to Sir Richard Manhood, one of the chief barons of the exchequer; but finding that by his employment he could not raise his fortune, he went to Ireland in 1588, with fewer pounds in his pocket than he afterwards acquired thousands a-year. He was then about 22, had a graceful person, and many accomplishments, which enabled him to render himself useful to several of the principal persons employed in the government, by drawing up for them memorials, cases, and answers. In 1595, he married Joan the daughter and coheir of William Ansley, who had fallen in love with him; and she dying in labour of her first child, who was born dead, in 1599, left him an estate of 500*l.* a year in land. In

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consequence of various services, and the great abilities he displayed, he gradually rose to the highest offices, and even to the dignity of the peerage of Ireland; to which he was raised by king James I. on the 29th of September 1616, by the style and title of *baron of Toughall*, in the county of Cork: four years after, he was created viscount Dungarvan and earl of Cork; and in 1631 was made lord treasurer of Ireland, an honour that was made hereditary to his family. He particularly distinguished himself by the noble stand he made, when the fatal rebellion broke out in that kingdom, in the reign of Charles I.; and in his old age acted with as much bravery and military skill, as if he had been trained from his infancy to the profession of arms. He turned the castle of Lismore, his capital seat, into a fortress capable of demanding respect from the Irish. He immediately armed and disciplined his servants and Protestant tenants; and by their assistance, and a small army raised and maintained at his own expence, which he put under the command of his four sons, defended the province of Munster, and in the space of a year took several strong castles, and killed upwards of 3000 of the enemy: during which time he paid his forces regularly; and when all his money was gone, like a true patriot converted his plate into coin. This great man died on the 15th of September, 1634.

BOYLE (Richard), earl of Burlington and Cork, son to the former, was a nobleman of unblemished loyalty in rebellious times, and of untainted integrity in times of the greatest corruption. He was born at Youghall, October 20th, 1612, while his father was in the beginning of his prosperity, and only Sir Richard Boyle. He distinguished himself by his loyalty to king Charles I. He not only commanded troops, but raised and for a long time paid them, and continued to wait upon the king as long as any one place held out for him in England, and then was forced to compound for his estate. He contributed all in his power to the Restoration; on which king Charles II. raised him to the dignity of earl of Burlington, or Bridlington, in the county of York, in the year 1663. He died Jan. 15. 1697-8, in the 86th year of his age.

BOYLE (Roger), earl of Orrery, younger brother of the former, and the fifth son of Richard, styled the *Great earl of Cork*, was born April 25. 1621; and by the credit of his father with the lord deputy Faulkland, raised to the dignity and title of *baron Broghill*, when only seven years old. He was educated at the college of Dublin, where he soon distinguished himself as an early and promising genius. He afterwards made the tour of France and Italy; and at his return assisted his father in opposing the rebellious Irish, in which he behaved with all the spirit of a young, and all the discretion of an old, officer. Upon the murder of the king, he retired to Marlton in Somersetshire, and hid himself in the privacy of a close retirement; but being at length ashamed to sit the tame spectator of all the mischief that appeared round him, he resolved to attempt something in favour of the king; and under the pretence of going to the Spa for the recovery of his health, he determined to cross the seas, and apply himself to king Charles II. for a commission to raise what forces he could in Ireland, in order to restore his majesty, and recover his own estate. To this purpose, he prevailed on the earl of Warwick to procure a licence for his

going to the Spa; and having raised a considerable sum of money, came up to London to prosecute his voyage: but he had not been long in town when he received a message from Cromwell, who was then general of the parliament's forces, that he intended to wait upon him. The lord Broghill was surprised at this message, having never had the least acquaintance with Cromwell; and desired the gentleman to let the general know, that he would wait upon his excellency. But while he was waiting the return of the messenger, Cromwell entered the room; and after mutual civilities had passed between them, told him in few words, that the committee of state were apprised of his design of going over and applying to Charles Stuart for a commission to raise forces in Ireland; and that they were determined to make an example of him, if he himself had not diverted them from that resolution. The lord Broghill interrupted him, by assuring him that the intelligence which the committee had received was false, and that he neither was in a capacity nor had any inclination to raise disturbances in Ireland: but Cromwell, instead of making any reply, drew some papers out of his pocket, which were the copies of several letters which the lord Broghill had sent to those persons in whom he most confided, and put them into his hands. The lord Broghill, upon the perusal of these papers, finding it to no purpose to dissemble any longer, asked his excellency's pardon for what he had said, returned him his humble thanks for his protection against the committee, and intreated his direction how to behave in such a delicate conjuncture. Cromwell told him, that though till this time he had been a stranger to his person, he was not so to his merit and character: he had heard how gallantly his lordship had behaved in the Irish wars; and therefore, since he was named *lord lieutenant of Ireland*, and the reducing that kingdom was now become his province, he had obtained leave of the committee to offer his lordship the command of a general officer, if he would serve in that war; and he should have no oaths or engagements imposed upon him, nor be obliged to draw his sword against any but the Irish rebels.

The lord Broghill was infinitely surprised at so generous and unexpected an offer. He saw himself at liberty, by all the rules of honour, to serve against the Irish, whose rebellion and barbarities were equally detested by the royal party and the parliament. He desired, however, some time to consider of what had been proposed to him. But Cromwell briskly told him, that he must come to some resolution that very instant: that he himself was returning to the committee, who were still sitting; and if his lordship rejected their offer, they had determined to send him to the tower. Upon this, the lord Broghill, finding that his liberty and life were in the utmost danger, gave his word and honour that he would faithfully serve him against the Irish rebels: on which Cromwell once more assured him, that the conditions which he had made with him should be punctually observed; and then ordered him to repair to Bristol, adding, that he himself would soon follow him into Ireland. Lord Broghill, therefore, having settled the business of his command, went over into that country; where, by his conduct and intrepidity, he performed many important services, and fully justified the opinion Cromwell had conceived of him.

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Among other considerable exploits performed by lord Broghill, the following deserves to be particularly mentioned. Whilst Cromwell laid siege to Clonwell, Broghill being detached to disperse a body of 5000 men who had assembled to relieve the place, he, with 2000 horse and dragoons, came up with the enemy at Macrooms on the 10th of May 1650; and, without waiting for the arrival of his foot, immediately attacked and routed them, making their general prisoner. Then proceeding to the castle of Carrigdroghid, he sent a summons to the garrison to surrender before the arrival of his battering cannon, otherwise they were to expect no quarter. His own army was surprised at this summons, as knowing he had not one piece of heavy cannon: but Broghill had ordered the trunks of several large trees to be drawn at a distance by his baggage horses; which the besieged perceiving, and judging from the slowness of the motion that the guns must be of a vast bore, immediately capitulated. He afterwards relieved Cromwell himself at Clonwell, where that great commander happened to be so dangerously situated, that he confessed, nothing but the seasonable relief afforded him by lord Broghill could have saved him from destruction. When Ireton sat down before Limeric, he gave Broghill 600 foot and 400 horse, with orders to prevent lord Muskerry's joining the pope's nuncio, who had got together a body of 8000 men, and was determined to attempt the relief of Limeric. Muskerry was at the head of 1000 horse and dragoons, and about 2000 foot: notwithstanding which, lord Broghill fell resolutely upon him. The Irish, having the advantage of the ground and numbers, would have conquered, but for a stratagem of lord Broghill. In the heat of the action he desired those about him to repeat what he said; and then cried out as loud as he could, "They run, they run." The first line of the Irish looked round to see if their rear broke; and the rear seeing the faces of their friends, and hearing the shouts of the enemy, imagined that the first line was routed, and fled. The taking of Limeric, which put an end to the war in Ireland, was the consequence of this defeat.

When Cromwell became protector, he sent for lord Broghill, merely to take his advice occasionally. And we are told, that, not long after his coming to England, he formed a project for engaging Cromwell to restore the old constitution. The basis of the scheme was to be a match between the king (Charles II.) and the protector's daughter. As his lordship maintained a secret correspondence with the exiled monarch and his friends, it was imagined that he was beforehand pretty sure that Charles was not averse to the scheme, or he would not have ventured to have proposed it seriously to Cromwell; who at first seemed to think it not unfeasible. He soon changed his mind, however, and told Broghill that he thought his project impracticable: "For (said he) Charles can never forgive me the death

of his father." In fine, the business came to nothing, although his lordship had engaged Cromwell's wife and daughter in the scheme; but he never durst let the protector know that he had previously treated with Charles about it.

On the death of the protector, lord Broghill continued attached to his son Richard, till, when he saw that the honesty and good-nature of that worthy man would infallibly render him a prey to his many enemies, he did not think it advisable to sink with a man that he could not save. The dark clouds of anarchy seemed now to be hovering over the British island. Lord Broghill saw the storm gathering, and he deemed it prudent to retire to his command in Ireland, where he shortly after had the satisfaction of seeing things take a turn extremely favourable to the design he had long been well-wisher to, viz. that of the king's restoration. In this great event lord Broghill was not a little instrumental; and, in consideration of his eminent services in this respect, Charles created him Earl of Orrery by letters-patent bearing date September 5. 1660. He was soon after made one of the lords justices of Ireland; and his conduct, while at the head of affairs in that kingdom, was such as greatly added to the general esteem in which his character was held before.

His lordship's active and toilsome course of life at length brought upon him some diseases and infirmities which gave him much pain and uneasiness; and a fever which fell into his feet, joined to the gout with which he was often afflicted, abated much of that vigour which he had shown in the early part of his life: but his industry and application were still the same, and bent to the same purposes; as appears from his letters, which show at once a capacity, and an attention to business, which do honour to that age, and may serve as an example to this.

Notwithstanding his infirmities, on the king's desiring to see his lordship in England, he went over in 1665. He found the court in some disorder; where his majesty was on the point of removing the great earl of Clarendon, lord high chancellor; and there was also a great misunderstanding between the two royal brothers. Lord Orrery undertook to reconcile the king with the duke of York; which he effected by prevailing on the latter to ask his majesty's pardon for some steps he had taken in support of the lord chancellor.

On his return to Ireland, he found himself called to a new scene of action. The Dutch war was then at its height; and the French, in confederacy with the Hollanders, were endeavouring to stir up the ashes of rebellion in Ireland. The duke de Beaufort, admiral of France, had formed a scheme for a descent upon Ireland; but this was rendered abortive by the extraordinary diligence, military skill, and prudent measures, of lord Orrery.

But in midst of all his labours, a dispute arose, founded on a mutual jealousy of each other's greatness, betwixt him and his old friend the duke of Ormond, then lord lieutenant; the bad effects of which were soon felt by both disputants, who resorted to England to defend their respective interests and pretensions, both having been attacked by secret enemies who suggested many things to their prejudice. This quarrel, though of a private beginning, became at last of a public nature; and producing first an attempt to frame an impeachment

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peachment against the duke of Ormond, occasioned in the end, by way of revenge, an actual impeachment against the earl of Orrery. He defended himself, however, so well against a charge of high crimes, and even of treason itself, that the prosecution came to nothing. He nevertheless lost his public employments; but not the king's favour: he still came frequently to court, and sometimes to council. After this revolution in his affairs, he made several voyages to and from Ireland; was often consulted by his majesty on affairs of the utmost consequence; and on all occasions gave his opinion and advice with the freedom of an honest plain-dealing man and a sincere friend; which the king always found him, and respected him accordingly.

In 1678, being attacked more cruelly than ever by his old enemy the gout, he made his last voyage to England for advice in the medical way. But his disorder was beyond the power of medicine; and having in his last illness given the strongest proofs of Christian patience, manly courage, and rational fortitude, he breathed his last on the 16th of October 1679, in the 59th year of his age. His lordship wrote, 1. A work intitled *The art of war*. 2. *Parthenissa*, a romance, in one volume folio. 3. Several poems. 4. Dramatic pieces, two volumes. 5. State-tracts, in one volume folio, &c. Mr Walpole, speaking of this nobleman, says, he never made a bad figure but as a poet. As a soldier, his bravery was distinguished, his stratagems remarkable. As a statesman, it is sufficient to say, that he had the confidence of Cromwell. As a man, he was grateful, and would have supported the son of his friend: but, like Cicero and Richelieu, he could not be content without being a poet; though he was ill qualified, his writings of that kind being flat and trivial.

BOYLE (Robert), one of the greatest philosophers as well as best men that our own or indeed any other nation has produced, was the seventh son and the 14th child of Richard earl of Cork, and born at Lismore in the province of Munster in Ireland, January 25. 1626-7. Before he went to school, he was taught to write a very fair hand, and to speak French and Latin, by one of the earl's chaplains, and a Frenchman that he kept in the house. In the year 1635, his father sent him over to England, in order to be educated at Eaton school, under Sir Henry Wotton, who was the earl of Cork's old friend and acquaintance. Here he soon discovered a force of understanding which promised great things, and a disposition to cultivate and improve it to the utmost. While he remained at Eaton, there were several very extraordinary accidents that befel him, of which he has given us an account; and three of which were very near proving fatal to him. The first was, the sudden fall of the chamber where he was lodged, when himself was in bed; when, besides the danger he run of being crushed to pieces, he had certainly been choaked with the dust during the time he lay under the rubbish, if he had not had presence of mind enough to have wrapped his head up in the sheet, which gave him an opportunity of breathing without hazard. A little after this, he had been crushed to pieces by a starting horse that rose up suddenly, and threw himself backwards, if he had not happily disengaged his feet from the stirrups, and cast himself from his back before he fell. A third accident proceeded from the carelessness of an apothecary's servant,

who, by mistaking the phials, brought him a strong vomit instead of a cooling julep.

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He remained at Eaton, upon the whole, between three and four years; and then his father carried him to his own seat at Stalbridge in Dorsetshire, where he remained for some time under the care of one of his chaplains who was the parson of the place. In 1638, he attended his father to London; and remained with him at the Savoy, till his brother Mr Francis Boyle espoused Mrs Elisabeth Killigrew; and then, towards the end of October, within four days after the marriage, the two brothers, Francis and Robert, were sent abroad upon their travels, under the care of Mr Marcombes. They embarked at Rye in Sussex, and from thence proceeded to Dieppe in Normandy: then they travelled by land to Rowen, so to Paris, and from thence to Lyons; from which city they continued their journey to Geneva, where his governor had a family; and there the two gentlemen pursued their studies without interruption. Mr Boyle, during his stay here, resumed his acquaintance with the mathematics, or at least with the elements of that science, of which he had before gained some knowledge. For he tells us in his own memoirs, that while he was at Eaton, and afflicted with an ague, before he was ten years old, by way of diverting his melancholy, they made him read *Amadis de Gaul*, and other romantic books, which produced such a restlessness in him, that he was obliged to apply himself to the extraction of the square and cube roots, and to the more laborious operations of algebra, in order to fix and settle the volatile operations of his fancy.

In September 1641, he quitted Geneva, after having spent 21 months in that city; and passing through Switzerland and the country of the Grisons, entered Lombardy. Then, taking his rout through Bergamo, Brescia, and Verona, he arrived at Venice; where having made a short stay, he returned to the continent, and spent the winter at Florence. Here he employed his spare hours in reading the modern history in Italian, and the works of the celebrated astronomer Galileo, who died in a village near this city during Mr Boyle's residence in it. It was at Florence that he acquired the Italian language; which he understood perfectly, though he never spoke it so fluently as the French. Of this indeed he was such a master, that as occasion required he passed for a native of that country in more places than one during his travels.

About the end of March 1642, he began his journey from Florence to Rome, which took up but five days. He surveyed the numerous curiosities of that city; among which, he tells us, "he had the fortune to see Pope Urban VIII. at chapel, with the cardinals, who severally appearing mighty princes, in that assembly looked like a company of common friars." He visited the adjacent villages which had any thing curious or antique belonging to them; and had probably made a longer stay, had not the heats disagreed with his brother. He returned to Florence; from thence to Leghorn; and so by sea to Genoa: then passing through the county of Nice, he crossed the sea to Antibes, where he fell into danger from refusing to honour the crucifix: from thence he went to Marseilles by land. He was in that city, in May 1642, when he received his father's letters, which informed him that the rebel-

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Boyle. lion had broken out in Ireland, and how difficultly he had procured the L.250 then remitted to them in order to help them home. They never received this money; and were obliged to go to Geneva with their governor Marcombes, who supplied them with as much at least as carried them thither. They continued there a considerable time, without either advice or supplies from England; upon which Marcombes was obliged to take up some jewels upon his own credit, which were afterwards disposed of with as little loss as might be; and with the money thus raised, they continued their journey for England, where they arrived in the year 1644. On their arrival, Mr Boyle found his father dead; and though the earl had made an ample provision for him, by leaving him his manor of Stalbridge in England, as well as other considerable estates in Ireland, yet it was some time before he could receive any money. However, he procured protections for his estates in both kingdoms from the powers then in being; from which he also obtained leave to go over to France for a short space, probably to settle accounts with his governor Mr Marcombes.

In March 1646, he retired to his manor at Stalbridge, where he resided for the most part till May 1650. He made excursions sometimes to London, sometimes to Oxford; and in February 1647, he went over to Holland: but he made no considerable stay any where. During his retirement at Stalbridge, he applied himself with incredible industry to studies of various kinds, to those of natural philosophy and chemistry in particular. He omitted no opportunity of obtaining the acquaintance of persons distinguished for parts and learning; to whom he was in every respect a ready, useful, generous assistant, and with whom he held a constant correspondence. He was also one of the first members of that small but learned body of men which, when all academical studies were interrupted by the civil wars, secreted themselves about the year 1645; and held private meetings, first in London, afterwards at Oxford, for the sake of canvassing subjects of natural knowledge upon that plan of experiment which Lord Bacon had delineated. They styled themselves then *The philosophic college*; and, after the Restoration, when they were incorporated and distinguished openly, they took the name of the *Royal Society*.

In the summer of 1654, he put in execution a design he had formed for some time of residing at Oxford, where he chose to live in the house of one Mr Crosse, an apothecary, rather than in a college, for the sake of his health, and because he had more room to make experiments. Oxford was indeed the only place at that time in England where Mr Boyle could have lived with much satisfaction; for here he found himself surrounded with a number of learned friends, such as Wilkins, Wallis, Ward, Willis, Wren, &c. suited exactly to his taste, and who had resorted thither for the same reasons that he had done, the philosophical society being now removed from London to Oxford. It was during his residence here that he improved that admirable engine the air-pump; and by numerous experiments was enabled to discover several qualities of the air, so as to lay a foundation for a complete theory. He was not, however, satisfied with this; but laboured incessantly in collecting and digesting, chiefly from his own experiments, the materials requisite for this purpose. He

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Boyle. declared against the philosophy of Aristotle, as having in it more words than things; promising much, and performing little; and giving the inventions of men for indubitable proofs, instead of building upon observation and experiment. He was so zealous for, and so careful about, this true method of learning by experiment, that though the Cartesian philosophy then made a great noise in the world, yet he would never be persuaded to read the works of Des Cartes, for fear he should be amused and led away by plausible accounts of things founded on conjecture, and merely hypothetical. But philosophy, and inquiries into nature, though they engaged his attention deeply, did not occupy it entirely; since we find that he still continued to pursue critical and theological studies. In these he had the assistance of some great men, particularly Dr Edward Pocock, Mr Thomas Hyde, and Mr Samuel Clarke, all of great eminence for their skill in the oriental languages. He had also a strict intimacy with Dr Thomas Barlow, at that time head keeper of the Bodleian library, and afterwards bishop of Lincoln, a man of various and extensive learning. In the year 1659, Mr Boyle, being acquainted with the unhappy circumstances of the learned Sanderson, afterwards bishop of Lincoln, who had lost all his preferments on account of his attachment to the royal party, conferred upon him an honorary stipend of 50 l. a-year. This stipend was given as an encouragement to that excellent master of reasoning to apply himself to the writing of "*Cases of Conscience*:" and accordingly he printed his lectures *De obligatione conscientiae*, which he read at Oxford in 1647, and dedicated them to his friend and patron.

Upon the restoration of Charles II. Mr Boyle was treated with great civility and respect by the king, as well as by the two great ministers the lord treasurer Southampton and the lord chancellor Clarendon. He was solicited by the latter to enter into holy orders, not only out of regard to him and his family, but chiefly with a view to serve the church itself; for Mr Boyle's noble family, his distinguished learning, and, above all, his unblemished reputation, induced Lord Clarendon to think that any ecclesiastical preferments he might attain would be worthily discharged, so as to do honour to the clergy, and service to the established communion. Mr Boyle considered all this with due attention: but, to balance these, he reflected, that, in the situation of life in which he was, whatever he wrote with respect to religion would have so much the greater weight as coming from a layman: since he well knew that the irreligious fortified themselves against all that the clergy could offer, by supposing, and saying, that it was their trade, and that they were paid for it. He considered likewise, that, in point of fortune and character, he needed no accessions; and indeed he never had any appetite for either. He chose, therefore, to pursue his philosophical studies in such a manner as might be most effectual for the support of religion; and began to communicate to the world the fruits of these studies.

The first of these was printed at Oxford in 1660, in 8vo, under the title of, 1. New experiments, physico-mechanical, touching the spring of the air and its effects. 2. Seraphic love; or some motives and incentives to the love of God, pathetically discoursed of in a

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letter

Boyle. letter to a friend 3. Certain physiological essays and other tracts, 1661, 4to. 4. Sceptical chemist, 1662, 8vo; a very curious and excellent work, reprinted about the year 1679, 8vo, with the addition of divers experiments and notes about the producibleness of chemical principles.

In the year 1663, the royal society being incorporated by king Charles II. Mr Boyle was appointed one of the council; and as he might be justly reckoned among the founders of that learned body, so he continued one of the most useful and industrious of its members during the whole course of his life. In June 1663, he published, 5. Considerations touching the usefulness of experimental natural philosophy, 4to. 6. Experiments and considerations upon colours; to which was added a letter, containing, Observations on a diamond that shines in the dark, 1663, 8vo. This treatise is full of curious and useful remarks on the hitherto unexplained doctrine of light and colours; in which he shows great judgment, accuracy, and penetration; and may be said to have led the way to that mighty genius the great Sir Isaac Newton, who has since set that point in the clearest and most convinced light. 7. Considerations on the style of the Holy Scriptures, 1663, 8vo. It was an extract from a larger work, intitled, *An essay on scripture*; which was afterwards published by Sir Peter Pett, a friend of Mr Boyle's.

In 1664, he was elected into the company of the royal mines; and was all this year taken up in the prosecution of various good designs, which probably was the reason why he did not send abroad any treatises either of religion or philosophy. The year following, came forth, 8. Occasional reflections upon several subjects; whereto is prefixed a discourse about such kind of thoughts, 1665, 8vo. This piece is addressed to *Sophronia*, under whose name he concealed that of his beloved sister the viscountess of Ranelagh. The thoughts themselves are on a vast variety of subjects, written many years before; some indeed upon trivial occasions, but all with great accuracy of language, much wit, more learning, and in a wonderful strain of moral and pious reflection. Yet this exposed him to the only severe censure that ever was passed upon him; and that too from no less a man than the celebrated Dean Swift, who, to ridicule these discourses, wrote *A pious meditation upon a broomslick, in the style of the honourable Mr Boyle*. But as his noble relation the late Lord Orrery has said, "To what a height must the spirit of sarcasm arise in an author, who could prevail on himself to ridicule so good a man as Mr Boyle? The sword of wit, like the scythe of time, cuts down friend and foe, and attacks every object that lies in its way. But, sharp and irresistible as the edge of it may be, Mr Boyle will always remain invulnerable."

The same year, he published an important work, intitled, 9. New experiments and observations upon cold, 1665, 8vo. In the year 1666, he published, 10. Hydrostatical paradoxes made out by new experiments, for the most part physical and easy, in 8vo. 11. The origin of forms and qualities, according to the corpuscular philosophy, illustrated by considerations and experiments. This treatise did great honour to Mr Boyle, whether we consider the quickness of his wit, the depth of his judgment, or his indefatigable pains in searching after truth. We must not forget to observe,

that, both in this and the former year, he communicated to his friend Mr Oldenburgh, who was secretary to the royal society, several curious and excellent short treatises of his own, upon a great variety of subjects, and others transmitted to him by his learned friends both at home and abroad, which are printed and preserved in the Philosophical Transactions.

In the year 1668, Mr Boyle resolved to settle in London for life: and removed for that purpose to the house of his sister, the lady Ranelagh, in Pall-Mall. This was to the infinite benefit of the learned in general, and particularly to the advantage of the royal society, to whom he gave great and continual assistance, as the several pieces communicated to them from time to time, and printed in their Transactions, do abundantly testify. Those who applied to him, either to desire his help, or to communicate to him any new discoveries in science, he had his set hours for receiving; otherwise it is easy to conceive that he would have had very little of his time for himself. But, besides these, he kept a very extensive correspondence with persons of the greatest figure, and most famous for learning, in all parts of Europe. In the year 1669, he published, 12. A continuation of new experiments touching the weight and spring of the air; to which is added, A discourse of the atmospheres of consistent bodies: and the same year he revised and made many additions to several of his former tracts, some of which were now translated into Latin, in order to gratify the curious abroad. 13. Tracts about the cosmical qualities of things; cosmical suspensions; the temperature of the subterraneous regions; the bottom of the sea: to which is prefixed an introduction to the history of particular qualities. This book occasioned much speculation, as it seemed to contain a vast treasure of knowledge which had never been communicated to the world before; and this too grounded upon actual experiments, and arguments justly drawn from them, instead of that notional and conjectural philosophy which in the beginning of the 17th century had been so much in fashion.

In the year 1671, he published, 14. Considerations on the usefulness of experimental and natural philosophy; the second part, 4to. And, 15. A collection of tracts upon several useful and important points of practical philosophy, 4to. Both of which works were received as new and valuable gifts to the learned world. 16. An essay about the origin and virtues of gems, 1672, 8vo. 17. A collection of tracts upon the relation between flame and air; and several other useful and curious subjects: besides furnishing, in this and the former year, a great number of short dissertations upon a vast variety of topics, addressed to the royal society, and inserted in their Transactions. 18. Essays on the strange subtilty, great efficacy, and determinate nature, of effluvia; to which were added a variety of experiments on other subjects; 1673, 8vo. 19. A collection of tracts upon the saltiness of the sea, the moisture of the air, the natural and preternatural state of bodies; to which is prefixed a dialogue concerning cold; 1674, 8vo. 20. The excellency of theology compared with philosophy, 1673, 8vo. This discourse was written in the year 1665, while Mr Boyle, to avoid the great plague which then raged in London, was forced to go from place to place in the country, and had little or no opportunity of consulting his books. It contains a great

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Boyle. great number of curious and useful, as well as just and natural, observations 21. A collection of tracts containing suspicions about hidden qualities of the air; with an appendix touching celestial magnets; animadversions upon Mr Hobbes's problem about a vacuum; a discourse of the cause of attraction and suction; 1674, 8vo. 22. Some considerations about the reconcileableness of reason and religion. By T. E. a layman. To which is annexed a discourse about the possibility of the resurrection. By Mr Boyle, 1675, 8vo. The reader must be informed, that both these pieces were of his writing, only he thought fit to mark the former with the final letters of his name. Among other papers that he communicated this year to the royal society, there were two connected into one discourse: the first was intitled, An experimental discourse of quicksilver growing hot with gold; the other related to the same subject; and both of them contained discoveries of the utmost importance.

In the year 1676, he published, 23. Experiments and notes about the mechanical origin or production of particular qualities, in several discourses on a great variety of subjects, and among the rest on electricity. In 1678, he communicated to Mr Hook a short memorial of some observations made upon an artificial substance that shines without any preceding illustration; which that gentleman thought fit to publish in his *Lectiones Cutlerianæ*. 24. Historical account of a degradation of gold made by an anti-elixir. This made a great noise both at home and abroad, and is looked upon as one of the most remarkable pieces that ever fell from his pen; since the facts contained in it would have been esteemed incredible, if they had been related by a man of less integrity and piety than Mr Boyle. The regard which the great Newton had for Mr Boyle, appears from a very curious letter, which the former wrote to him, at the latter end of this year, for the sake of laying before him his sentiments of that ethereal medium, which he afterwards considered in his Optics as the cause of gravitation. This letter is to be found in the life of our author by the reverend Dr Birch.

In the year 1680, Mr Boyle published, 25. The aerial noctiluca; or some new phenomena, and a process of a factitious self-shining substance, 8vo. This year the royal society, as a proof of the just sense of his great worth, and of the constant and particular services which through a course of many years he had done them, made choice of him for their president; but he being extremely, and, as he says, peculiarly tender in point of oaths, declined the honour done him, by a letter addressed to "his much respected friend Mr Robert Hooke, professor of mathematics at Gresham College." 26. Discourse of things above reason; inquiring, whether a philosopher should admit any such; 1681, 8vo. 27. New experiments and observations upon the icy noctiluca: to which is added a chemical paradox, grounded upon new experiments, making it probable that chemical principles are transmutable, so that out of one of them others may be produced: 1682, 8vo. 28. A continuation of new experiments, physico-mechanical, touching the spring and weight of the air, and their effects, 1682, 8vo. In 1683, he published nothing but a short letter to Dr Beale, in relation to the making of fresh water out of salt. In 1684, he pub-

Boyle. lished two very considerable works, viz. 29. Memoirs for the natural history of human blood, especially the spirit of that liquor, 8vo; and, 30. Experiments and considerations about the porosity of bodies, &c.

In 1685, Mr Boyle obliged the world with, 31. Short memoirs for the natural experimental history of mineral waters, with directions as to the several methods of trying them; including abundance of new and useful remarks, as well as several curious experiments. 32. An essay on the great effects of even languid and unheeded motion; whereunto is annexed an experimental discourse of some hitherto little regarded causes of the salubrity and insalubrity of the air and its effects. None of his treatises, it is said, were ever received with greater or more general applause than this. 33. Of the reconcileableness of specific medicines to the corpuscular philosophy; to which is annexed a discourse about the advantages of the use of simple medicines; 8vo. Besides these philosophical tracts, he gave the world the same year, an excellent theological one, 34. Of the high veneration man's intellect owes to God, peculiarly for his wisdom and power, 8vo.

At the entrance of the succeeding year, came abroad his, 35. Free inquiry into the vulgarly received notion of nature; a piece which was then, and will always be, greatly admired by those who have a true zeal and relish for pure religion and philosophy. In 1687, he published, 36. The martyrdom of Theodora and Didymia; a work he had drawn up in his youth. 37. A disquisition about the final causes of natural things; wherein it is inquired, whether, and (if at all) with what caution, a naturalist should admit them; with an appendix about vitiated light; 1688, 8vo. In the month of May this year, our author, though very unwilling, was constrained to make his complaint to the public, of some inconveniences under which he had long laboured; and this he did by an advertisement, about "the loss of many of his writings addressed to J. W. to be communicated to those of his friends that are virtuosi; which may serve as a kind of preface to most of his mutilated and unfinished writings." He complains in this advertisement of the treatment he had met with from plagiarists both at home and abroad; and though it might have been difficult in any other man to have done so without incurring the imputation of self conceit and vanity, yet Mr Boyle's manner is such as only to raise in us an higher esteem and admiration of him. This advertisement is inserted at length in his life by Birch.

He began now to find that his health and strength, notwithstanding all his care and caution, gradually declined, as he observes in a letter to Mr Le Clerc, dated May 30th, 1689; which put him upon using every possible method of husbanding his remaining time for the benefit of the learned. It was with this view that he no longer communicated particular discourses, or new discoveries, to the royal society; because this could not be done without withdrawing his thoughts from tasks which he thought of still greater importance. It was the more steadily to attend to these, that he resigned his post of governor of the corporation for propagating the gospel in New-England; nay, he went so far as to signify to the world that he could no longer receive visits as usual, in an advertisement which begins in the following manner: "Mr Boyle finds himself

Boyle. obliged to intimate to those of his friends and acquaintance, that are wont to do him the honour and favour of visiting him, 1. That he has by some unlucky accidents, namely, by his servant's breaking a bottle of oil of vitriol over a chest which contained his papers, had many of his writings corroded here and there, or otherwise so maimed, that, without he himself fill up the lacunæ out of his memory or invention, they will not be intelligible. 2. That his age and sickness have for a good while admonished him to put his scattered and partly defaced writings into some kind of order, that they may not remain quite useless. And, 3. That his skilful and friendly physician, Sir Edmund King, seconded by Mr Boyle's best friends, has pressingly advised him against speaking daily with so many persons as are wont to visit him, representing it as what cannot but waste his spirits, &c. He ordered likewise a board to be placed over his door, with an inscription signifying when he did, and when he did not, receive visits."

Among the other great works, which by this means he gained time to finish, there is great reason to believe, that one was a collection of elaborate processes in chemistry; concerning which he wrote a letter to a friend, which is still extant; wherein we read, that "he left it as a kind of hermetic legacy to the studious disciples of that art." Besides these papers committed to the care of one whom he esteemed his friend, he left very many behind him at his death, relating to chemistry; which, as appears by a letter directed to one of his executors, he desired might be inspected by three physicians whom he named, and that some of the most valuable might be preserved.

In the mean time, Mr Boyle published some other works before his death; as, 38. *Medicina Hydrostatica*; or, Hydrostatics applied to the materia medica, showing how, by the weight that divers bodies used in physics have in water, one may discover whether they be genuine or adulterated. To which is subjoined a previous hydrostatical way of estimating ores, 1690, 8vo. 39. The Christian virtuoso; showing, that, by being addicted to experimental philosophy, a man is rather assisted than indisposed to be a good Christian. To which are subjoined, 1. A discourse about the distinction that represents some things as above reason, but not contrary to reason. 2. The first chapters of a discourse intitled *Greatness of mind promoted by Christianity*. The last work which he published himself, was in the spring of 1691; and is intitled, 40. *Experimenta et Observationes Physicæ*: wherein are briefly treated of several subjects relating to natural philosophy in an experimental way. To which is added a small collection of strange reports, 8vo.

About the entrance of the summer, he began to feel such an alteration in his health as induced him to think of settling his affairs; and accordingly, on the 18th of July, he signed and sealed his last will, to which he afterwards added several codicils. In October, his distempers increased; and on the last day of December 1691, he departed this life, in the 65th year of his age. He was buried in St Martin's church in the Fields, Westminster, on the 7th of January following; and his funeral sermon was preached by Dr Gilbert Burnet, bishop of Salisbury. The bishop made choice upon this occasion of a text very apposite to the subject; namely,

"For God giveth to a man that is good in his sight, wisdom, knowledge, and joy *." After explaining the meaning of the words, he applied the doctrine to the honourable person deceased; of whom, he tells us, he was the better able to give a character from the many happy hours he had spent in conversation with him, in the course of 29 years. He gives a large account of Mr Boyle's sincere and unaffected piety; and more especially of his zeal for the Christian religion, without having any narrow notions concerning it, or mistaking, as so many do, a bigotted heat in favour of a particular sect, for that zeal which is an ornament of a true Christian. He mentions, as a proof of this, his noble foundation for lectures in defence of the gospel against infidels of all sorts; the effects of which have been so conspicuous in the many volumes of excellent discourses which have been published in consequence of that noble and pious foundation. He was at the charge of the translation and impression of the New Testament into the Malayan tongue, which he sent over all the East Indies. He gave a noble reward to him that translated Grotius's incomparable book "Of the truth of the Christian religion" into Arabic; and was at the charge of a whole impression, which he took care should be dispersed in all the countries where that language was understood. He was resolved to have carried on the impression of the New Testament in the Turkish language; but the company thought it became them to be the doers of it, and so suffered him only to give a large share towards it. He was at 700l. charge in the edition of the Irish bible, which he ordered to be distributed in Ireland; and he contributed liberally to the impression of the Welsh bible. He gave, during his life, 300l. to advance the design of propagating the Christian religion in America; and as soon as he heard that the East India company were entertaining propositions for the like design in the east, he sent 100l. for a beginning, as an example, but intended to carry it much farther when it should be set on foot to purpose.

In other respects his charities were so bountiful and extensive, that they amounted, as this prelate tells us, from his own knowledge, to upwards of 1000l. a-year. But as our limits will not allow us to follow the bishop in the copious and eloquent account he has given of this great man's abilities, we must therefore content ourselves with adding the short eulogium by the celebrated physician, philosopher, and chemist, Dr Herman Boerhaave; who, after having declared lord Bacon to be the father of experimental philosophy, asserts, that "Mr Boyle, the ornament of his age and country, succeeded to the genius and inquiries of the great chancellor Verulam. Which (says he) of all Mr Boyle's writings shall I recommend? All of them. To him we owe the secrets of fire, air, water, animals, vegetables, fossils: so that from his works may be deduced the whole system of natural knowledge." The reader perhaps may here be pleased to know, that Mr Boyle was born the same year in which lord Bacon died.

As to the person of this great man, we are told, that he was tall, but slender; and his countenance pale and emaciated. His constitution was so tender and delicate, that he had divers sort of cloaks to put on when he went abroad, according to the temperature

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Boyle. of the air; and in this he governed himself by his thermometer. He escaped indeed the small-pox; but for almost forty years he laboured under such feebleness of body, and such lowness of strength and spirits, that it was astonishing how he could read, meditate, make experiments, and write, as he did. He had likewise a weakness in his eyes; which made him very tender of them, and extremely apprehensive of such distempers as might affect them. He imagined likewise, that if sickness should confine him to his bed, it might raise the pains of the stone to a degree which might be above his strength to support; so that he feared his last minutes should be too hard for him. This was the ground of all the caution and apprehension with which he was observed to live; but as to life itself, he had that just indifference for it which became a philosopher and a Christian. However, his sight began to grow dim not above four hours before he died; and when death came upon him, he had not been above three hours in bed before it made an end of him, with so little pain that the flame appeared to go out merely for want of oil to maintain it.

Mr Boyle was never married; but Mr Evelyn was assured, that he courted the beautiful and ingenious daughter of Cary earl of Monmouth, and that to this passion was owing his "Seraphic Love." In the memorandum of Mr Boyle's life set down by bishop Burnet, it is remarked that he abstained from marriage, at first out of policy, afterwards more philosophically; and we find by a letter of Dr John Wallis to him, dated at Oxford, July 17th, 1669, that he had an overture made him with respect to the Lady Mary Hastings, sister to the earl of Huntingdon: But it does not appear from any of his papers, that he had ever entertained the least thoughts of that kind; nay, there is a letter of his, wrote when he was young, to the Lady Barrymore his niece, who had informed him of a report that he was actually married, which almost shows that he never did. The letter is written with great politeness, and in the true spirit of gallantry; and is a clear proof, that though Mr Boyle did not choose to marry, yet it was no misanthropic cynical humour which restrained him from it. It is impossible to entertain the reader better than by presenting him with that part of it which concerns the point in question. "It is high time for me to hasten the payment of the thanks I owe your ladyship for the joy you are pleased to wish me, and of which that wish possibly gives me more than the occasion of it would. You have certainly reason, madam, to suspend your belief of a marriage, celebrated by no priest but Fame, and made unknown to the supposed bridegroom. I may possibly ere long give you a fit of the spleen upon this theme; but at present it were incongruous to blend such pure raillery, as I ever prate of matrimony and amours with, among things I am so serious in as those this scribble presents you. I shall therefore only tell you, that the little gentleman and I are still at the old defiance. You have carried away too many of the perfections of your sex to leave enough in this country for reducing so stubborn a heart as mine; whose conquest were a task of so much difficulty, and so little worth it, that the latter property is always likely to deter any that hath beauty and merit enough to overcome the former. But though this untamed heart be thus insensible to the thing itself called *love*; it is yet very acces-

sible to things very near of kin to that passion; and esteem, friendship, respect, and even admiration, are things that their proper objects fail not proportionably to exact of me, and consequently are qualities which in their highest degrees are really and constantly paid my lady Barrymore by her most obliged humble servant, and affectionate uncle, ROBERT BOYLE."

We shall conclude this account of Mr Boyle with the mention of his posthumous works, which are as follow. 1. "The general History of the air designed and begun." 2. "General heads for the natural history of a country, great or small; drawn out for the use of travellers and navigators." 3. "A paper of the honourable Robert Boyle's, deposited with the secretaries of the Royal Society, October 14th, 1680, and opened since his death; being an account of his making the phosphorus, September 30th, 1680." Printed in the Philosophical Transactions. 4. "An account of a way of examining waters, as to freshness or saltness." 5. "A free discourse against customary swearing, and a dissuasive for cursing," 1695, 8vo. 6. "Medicinal experiments, or a collection of choice remedies, chiefly simple and easily prepared, useful in families, and fit for the service of the country people. The third and last volume, published from the author's original manuscript; whereunto is added several useful notes explanatory of the same." 1698, 12mo. Beautiful editions of all his works have been printed at London, in 5 volumes folio, and 6 volumes 4to.

BOYLE (Charles) earl of Orrery in Ireland, and baron of Mafton in the county of Somerset, was the second son of Roger the second earl of Orrery, and was born in August 1679. He was educated at Christ-church in Oxford, and soon distinguished himself by his learning and abilities. Like the first earl of Orrery, he was an author, a soldier, and a statesman. He translated the life of Lyfander from the Greek of Plutarch; and published a new edition of the epistles of Phalaris, which engaged him in a literary dispute, in which he defended the genuineness of these epistles against Dr Bentley. He was three times member for the town of Huntingdon; but his elder brother, Lionel earl of Orrery, dying on the 23d of August 1703 without issue, he succeeded to that title; and, entering into the Queen's service, had a regiment given him, when he behaved with such bravery, that in 1709 he was raised to the rank of major-general, and sworn one of her majesty's privy council. At the famous battle of the wood, he gave the strongest proofs of his intrepid courage, remaining at the head of his regiment in the warmest part of the action, till the victory was complete, which, as it was one of the most glorious, so it was the dearest bought, of any of that war. His lordship had the honour of being appointed the Queen's envoy to the states of Brabant and Flanders; and having honourably discharged the trust, was raised to the dignity of a British Peer, by the title of lord Boyle, baron of Mafton in Somersetshire. He enjoyed several other additional honours in the reign of King George I.; but having the misfortune to fall under the suspicion of the government, his lordship was committed to the tower: he was, however, at length, admitted to bail; and nothing being found that could be esteemed a sufficient ground for a prosecution, he was discharged. His lordship died after a slight indisposition, on the

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the 21st of August 1731. To his tutor, Mr Atterbury, he probably owed a good part of that fine relish he had for the writings of the ancients. He made these his constant study, and expressed a high contempt, says Budgell, for the greater part of our modern wits and authors. He was delighted with the company of two sorts of persons; either such as were really geniuses of the first rank, who had fine understandings, strong judgments, and true tastes; or such as had a few foibles, and an eye of ridicule in them, which served to make him laugh. He would rally these in so agreeable, and yet in so tender a manner, that, though it diverted himself and others, it was never offensive to the person rallied. The instrument which was invented by him, and bears his name, representing the solar system according to the sentiments of the new astronomers, is an undeniable proof of his mechanic genius. His lordship had also a turn for medicine; which led him not only to buy and read whatever was published on that subject, but also to employ his friends to send him accounts of herbs and drugs in foreign countries.

BOYLE (John), earl of Cork and Orrery, a nobleman distinguished by his learning and genius, was the only son of Charles earl of Orrery, and was born on the 2d of January 1707. He was educated at Christ-church college in Oxford; but, as he himself declares, early disappointments, indifferent health, and many untoward accidents, rendered him fond of retirement, and of improving his talents for polite literature and poetry; of which last art he gave several excellent specimens. He also wrote a Translation of Pliny the Younger's letter, with various notes, for the service of his eldest son the Lord Boyle, in two volumes, 4to. This was first published in 1751. The year following, he published the Life of Dean Swift, in several letters, addressed to his second son Hamilton Boyle; and afterwards printed Memoirs of Robert Cary earl of Monmouth, a manuscript presented to him by a relation, with explanatory notes. He died in 1762.

BOYLE'S Lectures, a course of eight sermons or lectures preached annually, set on foot by the honourable Robert Boyle, Esq; by a codicil annexed to his will in 1691; whose design, as expressed by the institutor, is, to prove the truth of the Christian religion against infidels, without descending to any controversies among Christians; and to answer new difficulties, scruples, &c. For the support of this lecture he assigned the rent of his house in Crooked-lane to some learned divine within the bills of mortality, to be elected for a term not exceeding three years, by the late Archbishop Tennison and others. But the fund proving precarious, the salary was ill paid; to remedy which inconveniences, the said archbishop procured a yearly stipend of L. 50 for ever, to be paid quarterly, charged on a farm in the parish of Brill in the county of Bucks. To this appointment we are indebted for many elaborate defences both of natural and revealed religion.

BOYNE, a river in Ireland, which rises in Queen's county in the province of Leinster, and runs north-east by Trim and Cavan, falling at last into the Irish channel a little below Drogheda. It is memorable for a battle fought on its banks between James II. and King William III. in which the former was defeated.

BOYSE, BOYS, or Bois (John), one of the transla-

tors of the Bible in the reign of James I. was son of William Bois, rector of West Stowe, near St Edmundsbury, Suffolk, and born at Nettlestead in Suffolk on the 3d of January 1560. He was taught the first rudiments of learning by his father; and his capacity was such, that at the age of five years he read the Bible in Hebrew. He went afterwards to Hadley school; and at 14 was admitted of St John's college, Cambridge, where he distinguished himself by his skill in Greek. Happening to have the small-pox when he was elected fellow, he, to preserve his seniority, caused himself to be carried in blankets to be admitted. He applied himself for some time to the study of medicine; but, fancying himself affected with every disease he read of, he quitted that science. He was ten years chief Greek lecturer in his college, and read every day. He voluntarily read a Greek lecture for some years at four in the morning, in his own chamber, which was frequented by many of the fellows. On the death of his father, he succeeded him in the rectory of West Stowe. At the age of 36, he married the daughter of Mr Holt, rector of Boxworth, in Cambridgeshire; whom he succeeded in that leaving, October 13. 1596. On his quitting the university, the college gave him L. 100. His young wife, who was bequeathed to him with the leaving, which was an advowson, proving a bad economist, and he himself being wholly addicted to his studies, he soon became so much involved in debt, that he was obliged to sell his choice collection of books, consisting of almost every Greek author then extant. When a new translation of the Bible was by King James I. directed to be made, Mr Bois was elected one of the Cambridge translators. He performed not only his own, but also the part assigned to another, with great reputation; though with no profit, for he had no allowance but his commons. He was also one of the six who met at Stationers Hall to revise the whole; which task they went through in nine months, having each from the company of stationers, during that time, 30 s. a-week. He afterwards assisted Sir Henry Saville in publishing the works of St Chrysostom. In 1615, Dr Lancelot Andrews, bishop of Ely, bestowed on him, unasked, a prebend in his church. He died on the 14th of January 1643, in the 84th year of his age. He left a great many manuscripts behind him, particularly a Commentary on almost all the books of the New Testament.—When he was a young student at Cambridge, he received from the learned Dr Whitaker three rules for avoiding those distempers which usually attend a sedentary life, to which he adhered with equal constancy and success. The first was, To study always standing; the second, Never to study in a window; and the third, Never to go to bed with his feet cold.

BOYSE (Joseph), a late eminent dissenting minister in Dublin, much respected not only for learning and abilities, but his extensive humanity and undissembled piety. During his ministerial charge at Dublin, he published many sermons which compose several folio volumes, a few poems, and other tracts; but what chiefly distinguished him as a writer, was the controversy he carried on with Dr King, archbishop of Dublin, and author of the *Origin of Evil*, concerning the office of a scriptural bishop. This controverted point was managed on both sides with great force of argument and calmness.

Boyse. calmness of temper. The bishop asserted, that the episcopal right of jurisdiction had its foundation in the New Testament: Mr Boyse, consistent with his principles, denied that any ecclesiastical superiority appeared there, with the greatest candour and good manners. He was father to

BOYSE (Samuel), the poet, a man remarkable for the fineness of his genius, the lowness of his manners, and the wretchedness of his life. He was born in 1708, and received the rudiments of his education in a private school in Dublin. When he was but 18 years old, his father, who probably intended him for the ministry, sent him to the university of Glasgow, that he might finish his education there. He had not been a year at the university, when he fell in love with the daughter of a tradesman in that city, and was imprudent enough to interrupt his education by marrying her before he had entered into his 20th year. The natural extravagance of his temper soon exposed him to want; and as he had now the additional charge of a wife, his reduced circumstances obliged him to quit the university, and go over with his wife (who also carried a sister with her) to Dublin, where they relied on the old gentleman for support. Young Boyse was of all men the furthest removed from a gentleman; he had no graces of person, and fewer still of conversation. Never were three people of more libertine characters than young Boyse, his wife, and sister-in-law; yet the two ladies wore such a mask of decency before the old gentleman, that his fondness was never abated. The estate his father possessed in Yorkshire was sold to discharge his debts; and when the old man lay in his last sickness, he was entirely supported by presents from his congregation, and buried at their expence. We have no further account of Mr Boyse, till we find him soon after his father's death at Edinburgh. At this place his poetical genius raised him many friends, and some patrons of very great eminence. He published a volume of poems in 1731, to which are subjoined *The Tablature of Cebes*, and *A Letter upon Liberty*, inserted in the *Dublin Journal* 1726; and by these he obtained a very great reputation. They are addressed to the countess of Eglinton. This amiable lady was the patroness of all men of wit, and greatly distinguished Mr Boyse while he resided in that country. Upon the death of the viscountess Stormont, Mr Boyse wrote an elegy, which was very much applauded by her ladyship's relations. This elegy he intitled *The Tears of the Muses*, as the deceased lady was a woman of the most refined taste in the sciences, and a great admirer of poetry. The lord Stormont was so much pleased with this mark of esteem paid to the memory of his lady, that he ordered a very handsome present to be given to Mr Boyse by his attorney at Edinburgh. The notice which lady Eglinton and the lord Stormont took of our poet, recommended him likewise to the patronage of the duchess of Gordon; who was so solicitous to raise him above necessity, that she employed her interest in procuring the promise of a place for him. She gave him a letter, which he was next day to deliver to one of the commissioners of the customs at Edinburgh. It happened that he was then some miles distant from the city; and the morning on which he was to have rode to town with her grace's letter of recommendation proved to be rainy. This slender circumstance was enough to discourage Boyse, who never

looked beyond the present moment: he declined going to town on account of the rainy weather; and while he let slip the opportunity, the place was bestowed upon another, which the commissioner declared he kept for some time vacant in expectation of seeing a person recommended by the duchess of Gordon. Boyse at last having defeated all the kind intentions of his patrons towards him, fell into contempt and poverty, which obliged him to quit Edinburgh. He communicated his design of going to London to the duchess of Gordon; who, having still a very high opinion of his poetical abilities, gave him a letter of recommendation to Mr Pope, and obtained another for him to Sir Peter King the lord chancellor of England. Lord Stormont recommended him to the solicitor-general his brother, and many other persons of the first fashion. Upon receiving these letters, he, with great caution, quitted Edinburgh, regretted by none but his creditors. Upon his arrival in London, he went to Twickenham, in order to deliver the duchess of Gordon's letter to Mr Pope; but that gentleman not being at home, Mr Boyse never gave himself the trouble to repeat his visit. He wrote poems; but those, though excellent in their kind, were lost to the world, by being introduced with no advantage. He had so strong a propensity to grovelling, that his acquaintance were generally of such a cast as could be of no service to him; and those in higher life he addressed by letters, not having sufficient confidence or politeness to converse familiarly with them. Thus unfit to support himself in the world, he was exposed to variety of distresses, from which he could invent no means of extricating himself but by writing mendicant letters. It will appear amazing, that this man, of so abject a spirit, was voluptuous and luxurious; he had no taste for any thing elegant, and yet was to the last degree expensive. Can it be believed, that often when he had received but a guinea in consequence of a supplicating letter, he would go into a tavern, order a supper to be prepared, drink of the richest wines, and spend all the money that had just been given him in charity, without having any one to participate the regale with him, and while his wife and child were starving at home?

It was about the year 1740, that Mr Boyse, reduced to the last extremity of human wretchedness, had not a shirt, a coat, or any kind of apparel, to put on; the sheets in which he lay were carried to the pawn-broker's, and he was obliged to be confined to his bed with no other covering than a blanket. He had little support but what he got by writing letters to his friends in the most abject style; but was perhaps ashamed to let this instance of his distress be known, which probably was the occasion of his remaining six weeks in that situation. During this time he had some employment in writing verses for the Magazines; and whoever had seen him in his study, must have thought the object singular enough: he sat up in bed with the blanket wrapt about him, through which he had cut a hole large enough to admit his arm, and, placing the paper upon his knee, scribbled in the best manner he could the verses he was obliged to make: whatever he got by those, or any other of his begging letters, was but just sufficient for the preservation of life. And perhaps he would have remained much longer in this distressful state, had not a compassionate gentleman, upon hearing this circumstance related, ordered his clothes.

Boyse.

Boyse. clothes to be taken out of pawn, and enabled him to appear again abroad.

About the year 1745, Mr Boyse's wife died. He was then at Reading, and pretended much concern when he heard of her death. His business at Reading was to compile a Review of the most material transactions at home and abroad during the last war: in which he has included a short account of the late rebellion. Upon his return from Reading, his behaviour was more decent than it had ever been before; and there were some hopes that a reformation, though late, would be wrought upon him. He was employed by a bookseller to translate *Fenelon on the Existence of God*; during which time he married a second wife, a woman in low circumstances, but well enough adapted to his taste. He began now to live with more regard to his character, and supported a better appearance than usual; but while his circumstances were mending, and his irregular appetites losing ground, his health visibly declined. He had the satisfaction, while in this lingering illness, to observe a poem of his, intitled *The Deity*, recommended by two eminent writers, the ingenious Mr Fielding, and the reverend Mr James Hervey author of *The Meditations*.

Mr Boyse's mind was often religiously disposed; he frequently talked upon that subject, and probably suffered a great deal from the remorse of his conscience. The early impressions of his good education were never entirely obliterated; and his whole life was a continued struggle between his will and reason, as he was always violating his duty to the one, while he fell under the subjection of the other. It was in consequence of this war in his mind, that he wrote a beautiful poem called *The Recantation*. In May 1749, he died in obscure lodgings near Shoe-lane; but in sentiments, there is the greatest reason to believe, very different from those in which he had spent the greatest part of his life. An old acquaintance of his endeavoured to collect money to defray the expences of his funeral, so that the scandal of being buried by the parish might be avoided: but in vain; the remains of this son of the muses were, with very little ceremony, hurried away by the parish-officers.

Never was a life spent with less grace than that of Mr Boyse, and never were such distinguished abilities given to less purpose. His genius was not confined to poetry only: he had a taste for painting, music, and heraldry; with the latter of which he was very well acquainted. His poetical pieces, if collected, would make six moderate volumes. Many of them are scattered in *The Gentleman's Magazine*, marked with the letter T, and *Alceus*. Two volumes were published in London. An ode of his in the manner of Spenser, intitled *The Olive*, was addressed to Sir Robert Walpole, which procured him a present of ten guineas. He translated a poem from the High Dutch of Van Haren, in praise of peace, upon the conclusion of that made at Aix-la-Chapelle; but the poem which procured him the greatest reputation was that upon the attributes of the Deity. He was employed by Mr Ogle to translate some of Chaucer's tales into modern English, which he performed with great spirit, and received at the rate of three pence a line for his trouble. Mr Ogle published a complete edition of that old poet's *Canterbury Tales*, modernized; and Mr Boyse's name is put to such tales

as were done by him. In 1743, Mr Boyse published, without his name, an ode on the battle of Dettingen, intitled *Albion's Triumph*. Bozola
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Brabejum

BOZOLA, a town of Italy, in the duchy of Mantua, capital of a territory of the same name, and subject to the house of Austria. E. L. 10. 25. N. L. 45. 9.

BEQUADRO, QUADRATO, or *Durale*, in music, called by the French *b quarré*, from its figure $\boxplus$. This is what we call B natural or *sharp*, in distinction to B mol or *flat*. See FLAT and SHARP.

If the flat $\flat$ be placed before a note in the thorough bass, it intimates, that its third is to be minor; and if placed with any cypher over a note in the bass, as $\flat 6$, or $\flat 5$, &c. it denotes, that the fifth or sixth thereto are to be flat. But if the quadro $\boxplus$ be placed over any note, or with a cypher, in the thorough bass, it has the contrary effect; for thereby the note or interval thereto is raised to its natural order.

BRABANCIONES, in middle-age writers, a kind of Netherland soldiery, infamous for rapine, being little better than commissioned banditti, who hired themselves to fight for any that could pay them best. The word is variously written by the historians of those days; all given them from the country of Brabant, which was the chief nursery of those troops. They are also frequently confounded with the *Routiers*, *Routuriers*, *Ruptarii*, *Ruterarii*, *Corteraux*, &c.

BRABANT, a large province of the Netherlands, with the title of a duchy. It is bounded on the north by the province of Holland and the duchy of Guelderland; on the east, by the same duchy and the bishopric of Liege; on the south, by the province of Namur and Hainhalt; and on the west, by Zealand. It is divided into Dutch Brabant and Austrian Brabant; watered by several rivers, of which the Scheld, the Ruppel, and the Dommel, are the chief. The soil is very fertile; and it contains 26 fortified towns, of which Brussels is the capital.

BRABEJUM, the AFRICAN ALMOND: A genus of the monœcia order, belonging to the polygamia class of plants. In the male the corolla is four-parted: there are four stamina inverted in the throat; the style is bifid and abortive: The female has a four-parted corolla, revolved upwards, with four stamina, one pistil with two stigmas; the fruit is a roundish drupa with a globular seed. Of this genus there is but one species, viz. the *stellatifolium*, which is a native of the Cape of Good Hope. In Europe it seldom grows above eight or nine feet high, but in its native soil is a tree of a middling growth. It rises with an upright stem, which is soft, and full of pitch within, and covered with a brown bark. The leaves come out all round the branches at each joint: they are indented at their edges, standing on very short foot-stalks. The flowers are produced towards the end of their shoots, which are of a pale colour inclining to white. This may be propagated, though with difficulty, by layers made in April: but they are often two years before they produce roots strong enough to be taken from the plants. When the branches are laid down, it will be proper to slit them at the point (as is practised in laying carnations), which will promote their taking root. In winter, the plants should have a good greenhouse; but in summer they should be placed abroad in a sheltered situation.

BRA-

Brabeutes
||
Brachiaeus.

BRABEUTES, or **BRABEUTA**, in antiquity, an officer among the Greeks, who presided at the public games, and decided controversies that happened among the antagonists in the gymnistical exercises. The number of brabeutæ was not fixed; sometimes there was only one, but more commonly they amounted to nine or ten.

BRACCIANO, a town of St Peter's patrimony, about 12 miles north of Rome, situated on the west side of a lake to which it gives name. E. Long. 13. N. Lat. 42.

BRACCIOLINI (Francis), an Italian poet, a native of Postolia, and the friend of Pope Urban VIII. died about the year 1644, aged 80. He wrote, 1. An epic poem, intitled, The cross reconquered, under the emperor Heraclius. 2. An heroic poem, intitled, The mockery of the Pagan gods. 3. The election of Pope Urban VIII. in 23 books.

BRACE is commonly taken for a couple or pair, and applied by huntsmen to several beasts of game, as a brace of bucks, foxes, hares, &c.

BRACE, or *Brasse*, is also a foreign measure, answering to our fathom. See **FATHOM**.

BRACE, in architecture, a piece of timber framed in with bevil joints, the use of which is to keep the building from swerving either way. When the brace is framed into the kingsties or principal rafters, it is by some called a *strut*.

BRACE, in writing or printing, a crooked line inclosing a passage, as in a triplet.

BRACES, in the sea-language, are ropes belonging to all the yards of a ship, except the mizen, two to each yard, reeved through blocks that are fastened to pennants, seized to the yard-arms. Their use is either to square or traverse the yards. Hence to brace the yard, is to bring it to either side. All braces come aftward on; as, the main brace comes to the poop, the main-top-fail brace comes to the mizen-top and thence to the main-shrouds, the fore and fore-top-fail braces come down by the main and main-top-fail stays, and so of the rest. But the mizen-bowline serves to brace to the yard, and the cross-jack braces are brought forwards to the main shrouds, when the ship sails close by a wind.

BRACES of a Coach, thick straps of leather on which it hangs.

BRACELET, an ornament worn on the wrist, much used among the ancients: it was made of different materials, and in different fashions, according to the age and quality of the wearer. The word is French, *bracelet*; which Menage derives further from *braceletum*, a diminutive of *bracile*, a word occurring in writers of the Justinian age; all formed from the Latin *bracchium*, arm. It amounts to the same with what was called by the ancients, *armilla*, *brachiale*, *occulus*; in the middle age, *boga*, *bauga*, *armispatha*.

Bracelets are much worn by the savages of Africa, who are so excessively fond of them, as to give the richest commodities, and even their fathers, wives, and children, in exchange for those made of no richer materials than shells, glass-beads, and the like.

They form also, in modern civilized countries, a very common part of the ornaments of the ladies.

BRACHIAEUS, the name of a muscle. See **ANATOMY**, *Table of the Muscles*.

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Coracq. **BRACHIALIS**. See **ANATOMY**, *ibid.*

BRACHIUM, or **ARM**. See **ANATOMY**, n° 48, &c.

BRACHMINS, or **BRACHMANS**, a branch of the ancient Gymnosophists, or philosophers of India, remarkable for the severity of their lives and manners. See the article **GYMNOSOPHISTS**.

Some say they derive their name from the patriarch Abraham, whom they call in their language *Brachma*, or *Brama*. Others deduce it from the name of their god *Brachma*; which some again take to be the same with Abraham: whence Postel calls them *Abrahames*. F. Thomassin derives the word from the Hebrew *barach*, to *fly* or *escape*; because the Brachmans retire into the country and live in deserts. The same author gives us another derivation, *viz.* from the Hebrew *barach* (*benedicere, orare*), to *bless* or *pray*; in regard this is their principal occupation.—The Greeks ascribe to them the doctrine of the immortality of the soul, and certain notions concerning the nature of the Supreme Being and future rewards and punishments. To this species of knowledge the Brachmans added an infinite number of religious observances, which were adopted by Pythagoras in his school; such as fasting, prayer, silence, and contemplation. They were looked upon as the friends of the gods, because they affected to pay them so much regard; and as the protectors of mankind, because they paid them no regard at all. No bounds were therefore set to the respect and gratitude that were shown them: princes themselves did not scruple to consult these recluses upon any critical conjuncture, from a supposition, no doubt, that they were inspired; since it was impossible to imagine that they had the advantages of experience. We can scarcely, however, deny, that there might be among them some men of real virtue, whose minds relished the pure and ingenious delights of study and science; and who, by nobly raising their thoughts to the contemplation of the First Being, must have had more powerful incitements to render themselves worthy of his care, and none to justify them in deceiving and tyrannizing over their fellow-creatures.

There appear still some remains of the ancient brachmans in the east, under the denomination of Bramins. See **BRAMINS**.

BRACHYGRAPHY, the art of short-hand-writing. See **SHORT HAND**.

BRACHYLOGY, (from *βραχυς* and *λογος* "expression"), in rhetoric, the expressing any thing in the most concise manner. This, so far as consistent with perspicuity, is a virtue and beauty of style; but if obscurity be the consequence, which is often the case, it becomes a blemish and inexcusable defect.—Quintilian gives an instance of brachylogy from Sallust: *Mithridates corpore ingenti perinde armatus*; "Mithridates, as it were, armed with the hugeness of his stature."

BRACHYPTERA, a term used by Willoughby, to denote those hawks which have their wings so short as not to reach to the end of the tail. Of this kind are the goshawk, sparrowhawk, &c.

BRACHYPYRENIA, in the history of fossils, a genus of septariæ, with a short roundish nucleus. See **SEPTARIÆ**.

BRACHYTELOSTYLA, in natural history, the name by which Dr Hill calls those crystals which are composed of a short hexangular column terminated at each end by an hexangular pyramid. See **CRYSTAL**.

3 S

BRACKET,

Brachialis
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Brachyte-
lostyla.

Bracket
||
Bracton.

BRACKET, among carpenters, &c. a kind of wooden stay, serving to support shelves and the like.

BRACKETS, in a ship, the small knees, serving to support the galleries, and commonly carved. Also the timbers that support the gratings in the head are called *brackets*.

BRACKETS, in gunnery, are the cheeks of the carriage of a mortar: they are made of strong planks of wood, of almost a semicircular figure, and bound round with thick iron plates; they are fixed to the beds by four bolts, which are called *bed-bolts*; they rise up on each side of the mortar, and serve to keep her at any elevation, by means of some strong iron bolts, called *bracket-bolts*, which go through these cheeks or brackets.

BRACKLAU, a strong town in Poland, capital of a palatinate of the same name. The houses are built of wood. It was taken by the Turks in 1672, but retaken three years afterwards. It is seated on the river Bog, in E. Long. 29. 20. N. Lat. 48. 5.

BRACKLAW, a palatinate of that name, which is the eastern part of Podolia; it is also called *Lower Podolia*, and is of greater extent than Upper Podolia, but is more desolate, on account of the neighbourhood of the Tartars.

BRACKLEY, a borough-town in Northamptonshire, in England, seated on the edge of the county, next Buckinghamshire, on a branch of the river Ouse. It is an ancient and large corporation-town, containing two parish-churches; is governed by a mayor and aldermen; and sends two members to parliament. It had formerly a college, which is turned into a free school. W. Long. 1. 15. N. Lat. 52. 0.

BRACTEA, in natural history, denotes a spangle, or thin flake of any substance.

BRACTEA, in botany, a thin leaf or plate of any *folium florale*, ranged by Linnæus among the *fulera* of plants. These floral leaves differ in shape and colour from the other *folia* of the plant; are generally situated on the pedunculus, and often so near the corolla as to be easily mistaken for the *calyx*; than which, however, the *bractea* are generally more permanent. Examples of the floral leaves are seen in the *tilia*, *fumaria bulbosa*, *lavendula*, and *horminum*.

BRACKTEARIA, in natural history, a genus of scales, composed of small plates in form of spangles, each plate either being very thin, or fissile into very thin ones.

Of this genus there are a great many species, called from their different colours, *mica aurea*, or gold-glimmer; and *mica argentea*, silver-glimmer, or cats-silver, &c.

BRACKTON (Henry), lord chief justice of England in the reign of Henry III. was probably a native of Devonshire. He was educated at Oxford, where he took the degree of doctor of laws, and was made one of the itinerant judges about the year 1244. Ten years after he became chief justice, and had the earl of Derby's house in London assigned him for his town residence, during the minority of that nobleman. He is said to have filled this important office with singular reputation during 20 years. When he died is not known; probably it was in the reign of Edward I. He wrote *De legibus et consuetudinibus Anglia*, which

is one of the most ancient, and also most methodical books on our laws. His method is copied from Justinian. This work was printed at London in 1569, folio; and in 1640, 4to. The first is very incorrect.

BRAD, a town of Slavonia, seated on the north side of the river Save, in E. Long. 18. 40. N. Lat. 45. 20.

BRADFIELD, a town of Essex in England, in E. Long. 0. 30. N. Lat. 51. 14.

BRADFORD, a town of Wiltshire in England, seated in W. Long. 2. 40. N. Lat. 51. 20.

BRADFORD (John), a divine, and martyr to the reformation, was born in the former part of the reign of Henry VIII. at Manchester in Lancashire. Being a remarkable penman and accountant, he became secretary to Sir John Harrington, who was several times employed by king Henry, and his successor Edward VI. as paymaster to the troops abroad. Bradford at this time was a gay man, and to support his extravagance made free with the king's money; but being at last unable to support the reflection of his guilt, he determined to make restitution, and actually repaid the money. Quitting his employment of secretary, about the year 1547, he took chambers in the inner temple, and for some time studied the law; but finding in himself an inclination to preach the gospel, in the following year he removed to Catharine-hall in Cambridge, where he applied with such uncommon assiduity to the study of divinity, that in a much shorter time than usual he was admitted to the degree of master of arts, and soon after made fellow of Pembroke-hall. Bishop Ridley, who, in 1550, was translated to the see of London, charmed with Bradford's application and zeal, now sent for him to the metropolis, ordained and appointed him his chaplain. In 1553, he was also made chaplain to Edward VI. during which time he became one of the most popular preachers in the kingdom. Such a reformer was too dangerous to be suffered in the succeeding reign. Mary was hardly in possession of the crown, before Bradford's persecutions began. He was first confined in the tower for sedition, where he continued a year and an half; during which time he wrote several epistles that were dispersed in various parts of the kingdom. He was afterwards removed to other prisons, and at last brought to his trial before that infernal court of inquisition in which Gardiner sat as chief inquisitor, where he defended his principles to the last, in contempt of their utmost power. They condemned him to the flames; and he was accordingly burnt alive in Smithfield, on July 1. 1555. His works are, 1. Seventy-two letters, written to various people, whilst the author was in prison; printed in Bishop Coverdale's collection. 2. Ten letters, printed in Fox's acts and monuments. 3. Complaint of verity, 1559. 8vo. 4. Three examinations before the commissioners, and his private talk with the priests, with the original of his life, 1561, octavo. 5. Two notable sermons, 1574, octavo, 1631. 6. Godly meditations and prayers, 1614, 24to. 7. Treatise of repentance, 1622. With several translations and other pieces.

BRADFORTH, a town in the west of Yorkshire, seated on a branch of the river Aire, in W. Long. 1. 35. N. Lat. 53. 40.

BRADLEY (Dr James), a famous English astronomer,

Brad
||
Bradley.

Bradley. nomer, was the third son of William and Jane Bradley, and was born at Sherborne in Dorsetshire in the year 1692.

He was fitted for the university at North Leach by Mr Egles and Mr Brice, who kept a boarding school there; and from North Leach he was sent to Oxford. His friends intended him for the church, and his studies were regulated with that view; and as soon as he was of sufficient age to receive holy orders, the bishop of Hereford, who had conceived a great esteem for him, gave him the living of Bridstow, and soon after he was inducted to that of Welfrie in Pembrokeshire. But notwithstanding these advantages, from which he might promise himself still farther advancement in the church, he at length resigned his livings, that he might be wholly at liberty to pursue his favourite study the mathematics, and particularly astronomy. He was nephew to Mr Pound, a gentleman who is well known in the learned world by many excellent observations, and who would have enriched it with more, if the journals of his voyages had not been burnt at Pulo Condor, when the place was set on fire, and the English who were settled there cruelly massacred, Mr Pound himself very narrowly escaping with his life. With this gentleman, Mr Bradley passed all the time that he could spare from the duties of his function; and perhaps he sometimes trespassed upon them: he was then sufficiently acquainted with the mathematics to improve by Mr Pound's conversation; yet it does not appear that, in this study, he had any preceptor but his genius, or any assistant but his labour.

It may be easily imagined, that the example and conversation of Mr Pound did not render Bradley more fond of his profession than he was before; he continued, however, as yet to fulfil the duties of it, though at this time he had made such observations as laid the foundation of those discoveries which afterwards distinguished him as one of the greatest astronomers of his age. Though these observations were made as it were by stealth, they gained him at first the notice, and then the friendship, of the lord chancellor Macclesfield, Mr Newton, afterwards Sir Isaac, Mr Halley, and many other members of the royal society, into which he was soon elected a member. About the same time, the chair of Savilian professor of astronomy became vacant by the death of the celebrated Dr Keil; and Mr Bradley was elected to succeed him on the 31st of October 1721, being then just 29 years old; and his colleague was Mr Halley, who was professor of geometry on the same foundation. Bradley, upon his being elected into this professorship, gave up both his livings, and with great joy quitted a situation in which his duty was directly opposite to his inclination. From this time, he applied himself wholly to the study of his favourite science; and in the year 1727 he published his theory of the aberration of the fixed stars, which is allowed to be one of the most useful and ingenious discoveries of modern astronomy. Three years after this discovery, by which Mr Bradley acquired very great reputation, he was appointed lecturer in astronomy and physics, at the museum of Oxford.

He pursued his studies with equal application and delight; and in the course of his observations, which were innumerable, he discovered that the inclination of the earth's axis upon the plane of the ecliptic was not

always the same, but that it varied backwards and forwards some seconds, and that the period of these variations was nine years. This period seemed altogether unaccountable, as it could not be supposed to have any thing in common with the revolution of the earth, which is performed in one year. Mr Bradley, however, discovered the cause of this phenomenon in the Newtonian system of attraction. He published this discovery in 1737, so that in the space of about ten years he communicated to the world two of the finest discoveries in modern astronomy, which will for ever make a memorable epocha in the history of that science.

Mr Bradley always preserved the esteem and friendship of Mr Halley; who, being worn out by age and infirmities, thought he could do nothing farther for the service of astronomy, than procure for Mr Bradley the place of regius professor of astronomy at Greenwich, which he had possessed himself many years with the greatest reputation. With this view, he wrote many letters, which have been since found among Mr Bradley's papers, desiring his permission to apply for a grant of the reversion of it to him, and even offering to resign in his favour, if it should be thought necessary: but before Mr Halley could bring this kind project to bear, he died. Mr Bradley, however, obtained the place afterwards, by the favour and interest of my lord Macclesfield, who was afterwards president of the royal society. As soon as the appointment of Mr Bradley to this place was known, the university of Oxford sent him a diploma creating him doctor of divinity. The appointment of astronomer at Greenwich placed Mr Bradley in his proper element, and he pursued his observations with unwearied diligence. However numerous the collection of astronomical instruments at the observatory at Greenwich, it was impossible that such an observer as Dr Bradley should not desire to increase them, as well to answer those particular views, as in general to make observations with greater exactness. In the year 1748, therefore, he took the opportunity of the annual visit made by the royal society to the observatory, in order to examine the instruments and receive the professor's observations for the year, to represent so strongly the necessity of repairing the old instruments, and purchasing new, that the society thought proper to represent it to his majesty, and his majesty gave them L. 1000 for that purpose. This sum was laid out under the direction of Dr Bradley, who, with the assistance of the late celebrated Mr Graham and Mr Bird, furnished the observatory with as complete a collection of astronomical instruments, as the most skilful and diligent observer could desire. Dr Bradley, furnished with such assistance, pursued his observations with new assiduity, an incredible number of which were found after his death, and put into the hands of the royal society.

It has been already observed, that when Dr Bradley was elected to the professor's chair at Oxford, he gave up his two livings, which were at such a distance, that he could not possibly fulfil the duties of them himself; but it happened that after he was settled at Greenwich the living of that parish became vacant, which is very considerable, and which was offered to him, as he was upon the spot to perform the duty, and had the claim of uncommon merit to the reward. This

Bradley. living, however, Dr Bradley, very greatly to his honour, refused, fearing the duties of the astronomer would too much interfere with those of the divine. His majesty, however, hearing of the refusal, was so pleased with it, that he granted him a pension of 250l. a-year in consideration of his great abilities and knowledge in astronomy and other branches of the mathematics, which had procured so much advantage to the commerce and navigation of Great Britain, as is particularly mentioned in the grant which is dated the 15th of February 1752. Dr Bradley, about the same time, was admitted into the council of the royal society. In the year 1748, he was admitted a member of the royal academy of sciences and belles lettres of Berlin, upon the death of M. Crevier, first physician to his Catholic majesty; in the year 1752, a member of the imperial academy at Petersburg; and in 1757, of that instituted at Bologna.

Dr Bradley was still indefatigable in his observations, and whatever honour he received became an incitement to obtain new distinction; his corporeal abilities, however, at length declined, though his intellectual suffered no abatement. In the year 1760, he became extremely weak and infirm; and towards the end of June 1762, he was attacked with a total suppression of urine, caused by an inflammation of the reins, which on the 12th of July following put an end to his life, in the 70th year of his age. He was buried at Mitchin-Hampton, in Gloucestershire, in the same grave with his mother and his wife. In the year 1744, he married Susannah Peach, the daughter of a gentleman of that name in Gloucestershire, by whom he had only one daughter.

As to his character, he was remarkable for a placid and gentle modesty, very uncommon in persons of an active temper and robust constitution. It was still more remarkable, that, with this untroubled equanimity of temper, he was compassionate and liberal in the highest degree. Although he was a good speaker, and possessed the rare but happy art of expressing his ideas with the utmost precision and perspicuity, yet no man was a greater lover of silence, for he never spoke but when he thought it absolutely necessary. He did indeed think it necessary to speak when he had a fair opportunity to communicate any useful knowledge in his own way; and he encouraged those that attended his lectures to ask him questions, by the exactness with which he answered, and the care he took to adapt himself to every capacity. He was not more inclined to write than to speak, for he has published very little: he had a natural diffidence, which made him always afraid that his works should injure his character; and therefore suppressed many, which probably were well worthy of the public attention. He was even known, as it were, in spite of himself; and, in spite of himself, he was known much, and consequently much esteemed. He was acquainted with many of the first persons in this kingdom, persons eminent as well for their rank as their abilities: he was honoured by all men of learning in general; and there was not an astronomer of any eminence in the world with whom he had not a literary correspondence. Upon the whole, it may be said of Dr Bradley, that no man cultivated great talents with more success, or had a better claim to be ranked among the greatest astronomers of his age.

BRADNINCH, a town of Devonshire, once a considerable place, but some time ago totally destroyed by fire. W. Long. 3. 35. N. Lat. 50. 45.

BRADS, among artificers, a kind of nails used in building, which have no spreading heads as other nails have. They are distinguished by iron-mongers by six names; as *joiner's brads*, *flooring brads*, *batten brads*, *bill brads*, or *quarter heads*, &c. Joiner's brads are for hard wainscot; batten brads are for soft wainscot; bill brads are used when a floor is laid in haste, or for shallow joists subject to warp. See **NAIL**.

BRADSHAW (Henry), a Benedictine monk, was born at Chester, about the middle of the 15th century. Discovering an early propensity to religion and literature, he was received while a boy into the monastery of St Werberg in that city; and having there imbibed the rudiments of his education, he was afterwards sent to Gloucester college, in the suburbs of Oxford, where for a time he studied theology with the novices of his order, and then returned to his convent at Chester; here, in the latter part of his life, he applied himself chiefly to the study of history, and wrote several books. He died in the year 1513, the fifth of Henry VIII. His poetry is not inferior to that of any of his contemporaries. His works are, 1. *De antiquitate et magnificentia urbis Cestrie*. 2. *Chronicon*. 3. The life of the glorious virgin of St Werberg. Printed Lond. 1521, 4to, in verse. The life of St Werberg makes only part of this work; for it contains also a description of the kingdom of Mercia, life of St Etheldred, the life of St Sexburg, the foundation and history of Chester, and the chronicles of some kings. Possibly this work may include the two first. Bishop Tanner says, that he wrote a chronicle in English verse, extracted from Bede, Malmsbury, Geraldus, and others. Probably this is the chronicle above mentioned.

BRADWARDIN (Thomas), archbishop of Canterbury, was born at Hartfield in Sussex, about the close of the 13th century. He was educated at Merton College, Oxford, where he took the degree of doctor of divinity; and acquired the reputation of a profound scholar, a skilful mathematician, and consummate divine. Authors are not agreed as to his first preferments. Pitt says he was professor of divinity at Oxford. They agree, however, in asserting, that from being chancellor of the diocese of London, he became a courtier and confessor to Edward III. whom he constantly attended during his war with France, assisting that victorious prince with his advice, animating the troops, and fervently praying for their success. After his return from the war, he was made prebendary of Lincoln, and afterwards archbishop of Canterbury. He died at Lambeth in the year 1349, forty days after his consecration; and was buried in St Anselm's chapel, near the south wall. His works are, 1. *De causa Dei*, printed London, 1618, published by J. H. Savil. 2. *De geometria speculativa*, &c. Paris, 1495, 1512, 1530. 3. *De arithmetica practica*, Paris, 1502, 1512. 4. *De proportionibus*, Paris, 1495; Venice, 1505, folio. 5. *De quadratura circuli*, Paris, 1495, folio.

BRADY (Robert), born in Norfolk in 1643, was master of Caius college, Cambridge, regius professor there, and twice representative of that university in parliament. In 1685, he was made keeper of the records in the tower, and was physician in ordinary to James II.

Bradninch.
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Brady.

Brady. He wrote, An introduction to the Old English history; **Bradypus.** An history of England, from the time of the Romans to the end of the reign of Richard II.; and, A treatise on English boroughs. He died in 1700.

BRADY (Nicholas), an excellent divine and poet, born at Bandon, in the county of Cork, October 28th 1659. He studied at Westminster-school, and afterwards at Oxford and Dublin college. He was a zealous promoter of the Revolution; and, in 1690, when the troubles broke out in Ireland, by his interest with M^cCarty, king James's general, he thrice prevented the burning of the town of Bandon. Having quitted several preferments in Ireland, he settled in London, where he was successively promoted to several livings; and at the time of his death was rector of Clapham, minister of Richmond, and chaplain to the Duke of Ormond's troop of horse-guards. He wrote part of the new version of the Psalms, now sung in many churches in England and Ireland; the *Æneids* of Virgil, in 4 vols; and 3 vols of sermons. He died May 20th 1726.

Plate. **BRADYPUS**, or **SLOTH**, a genus of quadrupeds, **CIX. fig. 6.** belonging to the order of bruta. The characters are these: They have no fore-teeth in either jaw; the dog-teeth are blunt, solitary, and longer than the grinders; they have five grinders on each side. The body is covered with hair. There are only two species of bradypus, viz.

1. The tridactylus, or American sloth, has a short tail, and only three toes on each foot. It is about the size of a fox. The body is covered over with hair of a grey colour; the face is naked; the throat is yellowish; the fore-feet are longer than the hind feet; the claws, which are three on each foot, are compressed, and very strong; and they have no mammæ on the breast; they have no external ears, but only two winding holes. It is the most sluggish and most slow of all animals, and seems to move with the utmost pain. Its food is fruit, or the leaves of trees. If it cannot find fruit on the ground, it looks out for a tree well loaded, and with great pain climbs up: to save the trouble of descending, it flings off the fruit; and, forming itself into a ball, drops from the branches, continues at the foot till it has devoured all, nor ever stirs till compelled by hunger. It never drinks, and is terrified at rain.

The following wonderful account of this animal, from Kircher's *Musurgia*, is quoted by Mr Stillingfleet in his miscellaneous tracts. "The description (says Kircher) I had from father Torus, who resided in America, who had animals of this kind in his possession, and made many experiments in relation to their nature and qualities. Its figure is extraordinary; it is about the bigness of a cat, of very ugly countenance, and has claws extended like fingers. The hinder part of the head and neck are covered with hair. It sweeps the ground with its fat belly, never rises upon its feet, and moves so slowly, that it would scarce go the length of a bow-shot in 15 days, though constantly moving, and it is therefore called the *sloth*. It lives generally upon tops of trees, and employs two days to crawl up, and as many to get down again. Nature has doubly guarded this animal against its enemies. First, by giving it such strength in its feet, that whatever it seizes, it holds so fast, that it never can be freed from its claws, but must there die of hunger. Secondly, in giving it such a mo-

ving aspect, when it looks at any man who should be tempted to hurt it, that it is impossible not to be touched with compassion; besides, that at the same time it sheds tears, and upon the whole persuades one, that a creature so defenceless, and of so unhappy a body, ought not to be tormented. To make an experiment of this, the above mentioned father procured one of these animals to be brought to our college at Carthagenæ. He put a long pole under its feet, which it seized upon very firmly, and would not let go again. The animal therefore thus voluntarily suspended, was placed between two beams along with the pole, and there it remained without meat, drink, or sleep, 40 days; its eyes being always fixed on people that looked at it, who were so touched, that they could not forbear pitying it. At last being taken down, they let loose a dog on it, which after a little while the sloth seized with his feet, and held him four days till he died of hunger. This was taken from the mouth of the father. They add (continues Kircher), that this creature makes no noise but at night, but that very extraordinary. For by interruptions, that last about the length of a sigh or semipause, it goes through the six vulgar intervals of music, Ut, re, mi, fa, sol, la, La, sol, fa, mi, re, ut, ascending and descending, and these perfectly in tune. So that the Spaniards, when they first got possession of this coast, and heard these notes, imagined that some people brought up to our music were singing. This animal is called by the natives *haut*; certainly because, going through these musical intervals, it repeats, Ha, ha, ha, ha, ha, &c." To this account Linnæus seems, in his *Systema Naturæ*, to give credit. For he says, in his short way of description, among other things, "It utters an ascending hexachord: its noise is horrible; its tears are piteous." He quotes Musgrave, Clusius, Gesner, &c.

2. The didactylus has two toes on each foot, and no tail: The head is round; the ears are large; and it has two mammæ on the breast: The body is covered with ash-coloured hair. It is a native of Ceylon.

BRAE-MAR, a mountainous territory of Scotland, in the shire of Aberdeen, where the last earl of Mar began to raise a rebellion in 1715. It is 27 miles north-west of Aberdeen.

BRAE-Murray, a mountainous and woody tract of land, lying in the shires of Elgin and Nairn in Scotland.

BRAG, an ingenious and pleasant game at cards, where as many may partake as the cards will supply; the eldest hand dealing three to each person at one time, and turning up the last card all round. This done, each gamester puts down three stakes, one for each card.—The first stake is won by the best card turned up in the dealing round; beginning from the ace, king, queen, knave, and so downwards. When cards of the same value are turned up to two or more of the gamesters, the eldest hand gains; but it is to be observed, that the ace of diamonds wins, to whatever hand it be turned up.—The second stake is won by what is called the *brag*, which consists in one of the gamesters challenging the rest to produce cards equal to his: Now it is to be observed, that a pair of aces is the best brag, a pair of kings the next, and so on; and a pair of any sort wins the stake from the most valuable single card. In this part consists the great diversion of the game; for,

Brae
Brag.

Braga
||
Brahe.

for, by the artful management of the looks, gestures, and voice, it frequently happens, that a pair of fives, treys, or even duces, out-brags a much higher pair, and even some pairs royal, to the no small merriment of the company. The knave of clubs is here a principal favourite, making a pair with any other card in hand, and with any other two cards a pair royal.—The third stake is won by the person who first makes up the cards in his hand one and thirty; each dignified card going for ten, and drawing from the pack, as usual in this game.

BRAGA, the capital of the province of Entre-minhoduero, in Portugal, situated on the river Cavado, in W. Long. 8. 40. N. Lat. 41. 20.

BRAGANZA, a city of Portugal, and capital of a duchy of the same name. It is seated on an eminence, by a brook called *Parvenca*; and is divided into two parts, the old city and the town. The former is upon an eminence, and fortified with a double wall. That part next the town has five bastions, but no ditch; the citadel is on the opposite side joined to the wall. The town is in a plain, and defended by a fort with four bastions. It is seated near the river Sabor, on the frontiers of Galicea, in W. Long. 6. 15. N. Lat. 41. 27.

BRAGGOT, a kind of drink made of malt, honey, and spices, much used in Wales.

BRAHE (Tycho), a celebrated astronomer, descended of an illustrious family originally of Sweden but settled at Denmark, was born December 14th 1546, at Knudstorp in the county of Schonen. He was taught Latin when seven years old, and studied five years under private tutors. His father dying, his uncle sent him, in April 1559, to study philosophy and rhetoric at Copenhagen. The great eclipse of the sun on the 21st of August 1560, happening at the precise time the astronomers had foretold, he began to look upon astronomy as something divine; and purchasing the tables of Stadius, gained some notion of the theory of the planets. In 1562, he was sent by his uncle to Leipzig to study law; but astronomy wholly engrossed his thoughts, and in purchasing books on that science he employed all his pocket-money. Having procured a small celestial globe, he was wont to wait till his tutor was gone to bed, in order to examine the constellations and learn their names; and when the sky was clear, he spent whole nights in viewing the stars. In 1565, a difference arising between Brahe and a Danish nobleman, they fought, and the former had part of his nose cut off; which defect he so artfully supplied with one made of gold and silver, that it was not perceivable. It was about this time that he began to apply to chemistry, proposing nothing less than to obtain the philosopher's stone. In 1571, he returned to Denmark; and was favoured by his mother's brother, Steno Belle, a lover of learning, with a convenient place at his castle of Herritzvad near Knudstorp, for making his observations, and building a laboratory. His marrying a country girl, beneath his rank, occasioned such a violent quarrel between him and his relations, that the king was obliged to interpose to reconcile them. In 1574, by his majesty's command, he read lectures upon the theory of the comets at Copenhagen. The year following he began his travels through Germany, and proceeded as far as Venice: he then resolved to remove his family, and settle at Basil; but Frederic II. king

of Denmark being informed of his design, and unwilling to lose a man that was capable of being such an ornament to his country, promised to enable him to pursue his studies, to bestow upon him for life the island of Huen in the Sound, to erect an observatory and laboratory there, and to defray all the expences necessary for carrying on his designs. Tycho Brahe readily embraced this proposal; and accordingly the first stone of the observatory was laid August 8. 1576. The king also gave him a pension of 2000 crowns out of his treasury, a fee in Norway, and a canonry of Roskilde, which brought him in 1000 more. James VI. of Scotland, afterwards raised to the crown of England, going to Denmark in order to marry the princess Anne, paid a visit to our author in his retirement at Uraniburg, made him several presents, and with his own hand wrote a copy of verses in his praise; but, soon after the death of king Frederic, he was deprived of his pension, fee, and canonry; upon which, finding himself incapable of bearing the expences of his observatory, he went to Copenhagen, whither he brought some of his instruments, and continued his astronomical observations in that city, till Valkendorf, chamberlain to the household of Christian IV. commanded him by the king's order to discontinue them. He then removed his family to Rostock, and afterwards to Holstein, in order to solicit Henry Ranzou to introduce him to the emperor; and that gentleman complying with his request, he was received by the emperor at Prague with the utmost civility and respect. That prince gave him a magnificent house, till he could procure one for him more fit for astronomical observations; assigned him a pension of 3000 crowns; and promised, upon the first opportunity, a fee for him and his descendants: but he did not long enjoy this happy situation; for, upon the 24th of October 1601, he died of a retention of urine, in the 55th year of his age, and was interred in a very magnificent manner in the principal church at Prague, where a noble monument was erected to him.—His skill in astronomy is universally known, and he is famed for being the inventor of a new system, which he endeavoured, though without success, to establish upon the ruins of that of Copernicus. He was very credulous with regard to judicial astrology and presages. If he met an old woman when he went out of doors, or an hare upon the road on a journey, he used to turn back immediately, being persuaded that it was a bad omen. When he lived at Uraniburg, he had at his house a madman, whom he placed at his feet at table, and fed himself. As he imagined that every thing spoken by mad persons presaged something, he carefully observed all that this man said; and because it sometimes proved true, he imagined it might always be depended on. A mere trifle put him in a passion; and against persons of the first rank, with whom it was his duty to keep on good terms, he openly discovered his resentment. He was very apt to rally others, but highly provoked if the same liberty was taken with himself. His principal works are, 1. *Progymnasmatum astronomie*. 2. *De mundi aetherei recentioribus phenomenis*. 3. *Epistolarum astronomicarum liber*.

BRAHMA. See BRAMA.

BRAIDALBIN, a district of Perthshire in Scotland, stretching 32 miles from east to west, and 13 where broadest from south to north; is a mountainous country,

Brahe,
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Braidalbin.

Braidalin country, lying among the Grampian hills, supposed to be the country anciently known by the name of *Albanii*; whence the Highlanders to this day call themselves *Albinich*. It is bounded on the west by Lochaber, Lorn, and Knapdale; on the north and east, by part of Lochaber and part of Athol; and on the south by Strathern and Monteith. It produces plenty of game and black cattle; is inhabited by Highlanders said to be the most ferocious in all Scotland; and gives the title of earl to a branch of the Campbell family, which is possessed of a noble and magnificent seat in this division. Much flax is cultivated here. Some years ago, when premiums were given for the greatest crops, from 70 to 120 hogsheads of lintseed were annually sown, each peck yielding two stones of dressed flax; and when the yarn sold highest, L. 2000 worth has been sold out of the country. Oats and potatoes are the other crops. Oats yield from four to six fold at the most, oftener less; bear, from eight to ten, at an average six. The corn raised seldom suffices the number of inhabitants, so they are often obliged to have recourse to importation. From their potatoes some have distilled a very strong spirit, which has been found cheaper than what is distilled from any grain. Starch is also made from them; and, in some places, bread. Corcur, or the lichen omphaloides, is an article of commerce; great quantities have been scraped from the rocks, and exported for the use of the dyers, at the price of 1 s. or 16d. per stone. A good many sheep are reared here, and much wool is sent out of the country. There are few horses raised in this country: such as feed on the tops of the higher hills are often afflicted with a distemper that commonly proves fatal, if a remedy is not applied within 24 hours. It attacks them in the months of July and August, usually after a fall of rain, or before the dew rises in the morning. An universal swelling spreads over the body: the remedy is exercise, chafing, or any method that promotes urine and perspiration. The common people attribute this evil to a certain animal that scatters its poison over the grass; but, more probably, it arises from some noxious vegetable hitherto unobserved. Before the year 1745, lord Braidalbin was obliged to keep a constant guard for the protection of his vassals' cattle, or to retain spies among the thievish clans, having too much spirit to submit to pay an infamous tax, called *blackmeal*, to the plundering chieftains as the price of their safety.

BRAIL, or **BRAILS**, in a ship, are small ropes made use of to furl the sails across: they belong only to the two courses and the mizen-sail; they are reeved through the blocks, seized on each side the ties, and come down before the sail, being at the very skirt thereof fastened to the cringles; their use is, when the sail is furled across, to hale up its bunt, that it may the more easily be taken up or let fall. Hale up the brails, or brail up the sail; that is, Hale up the sail, in order to be furled or bound close to the yard.

BRAILOW, a town of Poland, in the province of Podolia, seated on the river Bog, in E. Long. 29. 0. N. Lat. 43. 50.

BRAIN, in anatomy, is that large, soft, whitish mass, inclosed in the cranium or skull; wherein all the organs of sense terminate, and the soul is supposed principally to reside. See *ANATOMY*, n° 17, 129, 136.

BRAIN le Comte, a town of the Austrian Netherlands, in the province of Hainault. E. Long. 4. 11. N. Lat. 50. 35.

BRAINTREE, a large town of Essex in England, situated in E. Long. 0. 30. N. Lat. 51. 50.

BRAKE, denotes female fern, or the place where it grows.—Also a sharp bit or snaffle for horses; and a baker's kneading-trough.—Also an instrument with teeth to bruise flax or hemp. See *FLAX-DRESSING*.

BRAKEL, a town of Germany, in the circle of Westphalia, and in the bishopric of Paderborn, seated on the rivulet Brught, in E. Long. 9. 8. N. Lat. 51. 46.

BRAMA, or **BRUMA**, a pagan deity of the East Indies. He is the first person of a kind of trinity in their theology; is the great progenitor of mankind; and has created as many worlds as there are considerable parts in his body. See the articles *BRACHMANS*, *BRAMINS*, and *INDOSTAN*.

BRAMA, in ichthyology, the trivial name of a species of cyprinus. See *CYPRINUS*.

BRAMANT, a town of Savoy, in the valley of Maurich, seated on the river Arck, in E. Long. 4. 15. N. Lat. 45. 0.

BRAMBER, a town of Suffex in England, formerly of some account, but has neither market nor fair; however, it sends two members to parliament. W. Long. 0. 15. N. Lat. 50. 50.

BRAMBLE, in botany, the English name of the *RUBUS*.

BRAMBLE-Net, otherwise called *ballier*, is a net to catch birds in of several sizes: the great meshes must be four inches square; those of the least size are three inches square; and those of the biggest, five. In the depth they should not be above three or four inches: but as for the length, they may be enlarged at pleasure; the shortest being 18 feet long.

BRAMBLE, or *Brambling*, in ornithology, the trivial name of a species of *FRINGILLA*.

BRAMER (Leonard), history-painter, was born at Delft in 1596; but learned the art of painting in the school of Rembrandt, and imitated the manner of his master in small. In the 18th year of his age he went to Rome for his improvement; but although he continued in Italy for some years, and acquired somewhat in his style rather more graceful than Rembrandt, yet he could never divest himself of the Flemish gout. He had a fine taste of design; his expression is generally good, and in some of his compositions truly noble. His pencil is delicate, and his colouring very peculiar in the tints, being also remarkably thin in many parts, so as barely to cover the pannel; yet, by great skill in the management of the *chiaro-scuro*, his colouring is bright, bold, and full of lustre; particularly in the vases, which he was fond of introducing in every subject that could admit them, as he knew how to give them a rich and fine relieve. He had accustomed himself to paint with a very thin body of colour, especially in the browns and shadowy parts, in order to give his pictures a greater transparency. At Venice, Naples, Florence, Mantua, and other cities of Italy, as well as at Rome, he left many proofs of his extraordinary merit, which rendered his name deservedly famous; and his works are rarely to be met with out of Italy, where he painted most; but whenever they are

Brain
||
Bramer.

Pilkington's
Dic.

Bramhall,
Bramins.

are to be purchased they are bought at considerable prices, if they are entire and undamaged. One of the most capital pictures of Bramer is the *Raising of Lazarus*, in which there is a charming opposition of light and shadow; and another is the *Denial of St Peter*: They are both painted in his best manner; they are bright, transparent, and finely penciled, and are still preserved at Rome. Likewise at the palace of Ryf-wick, there are several valuable paintings by this master; in which the invention and execution are highly commendable. But none of his works can be more admired than a small picture on copper representing the story of Pyramus and Thisbe.

BRAMHALL (Dr John), archbishop of Armagh, was born of an ancient family at Pontefract in Yorkshire, about the year 1593. He was invited over to Ireland by the lord deputy Wentworth; and soon after obtained the arch-deaconry of Meath, the best in that kingdom. In 1634, he was made bishop of Londonderry, which see he improved very much; but the greatest service he did to the church of Ireland, was by getting, with the deputy's assistance, several acts passed for abolishing see-farms, recovering impropriations, &c. by which, and by other means, he regained to the church in the space of four years £.30,000 or £.40,000 a year. In the convocation he prevailed upon the church of Ireland to unite in the same faith with the church of England, by adopting the 39 articles of that church; and would willingly have introduced the English canons, but could only prevail on their accepting such as they deemed proper. Articles of treason were exhibited against him in the Irish parliament; and at the treaty of Uxbridge in 1644, the English parliament made it a preliminary article, that Bishop Bramhall, with Archbishop Laud, and others, should be excepted from the general pardon. He went abroad; but on the restoration was appointed archbishop of Armagh, primate and metropolitan of all Ireland, and was chosen speaker of the House of Lords. He died in 1663; and was the author of several works, which are collected in one vol. folio.

BRAMINS, the name of the priests among the idolatrous Indians; the successors of the ancient Brachmans. See the title BRACHMANS.

Their name is formed from *Brama*, their particular deity. They are found in Siam, Malabar, China, Comandul, and most other eastern nations anywise civilized; but their chief seat is in Indostan†, or the Mogul's country. They have a language peculiar to themselves, which they call *Shanscrit*; in which they have several ancient books, written, as is alleged, by their great prophet Brahma; as the *shastram*, which is their bible; and *porane*, a history which they esteem sacred, and pretend to have been dictated by God himself.

There are several orders of Bramins. Those who mix in society are for the most part very corrupt in their morals: they believe that the water of the Ganges will wash away all their crimes; and, as they are not subject to any civil jurisdiction, live without either restraint or virtue, excepting that character of compassion and charity which is so commonly found in the mild climate of India. The others, who live abstracted from the world, are either weak-minded men or enthusiasts; and abandon themselves to laziness, superstition, and the dreams of metaphysics. We find in their dis-

putes the very same ideas that occur in the writings of our most celebrated metaphysicians; such as, substance, accident, priority, posteriority, immutability, indivisibility, &c.

Their religion, which was anciently of the allegorical and moral kind, hath degenerated into a heap of extravagant and obscene superstitions, owing to their having realized those fictions which were intended merely as so many symbols and emblems. Were it possible to obtain a sight of their sacred books, the only remains there are of the Indian antiquities, we might in some measure be enabled to remove the veil that envelopes those numerous mysteries; but the following story will show how little reason there is to hope that we shall ever be intrusted with such a communication.

The emperor Mahmoud Akbar had an inclination to make himself acquainted with the principles of all the religious sects throughout his extensive provinces. Having discarded the superstitious notions with which he had been prepossessed by his education in the Mahometan faith, he resolved to judge for himself. It was easy for him to be acquainted with the nature of those systems that are formed upon the plan of making proselytes; but he found himself disappointed in his design when he came to treat with the Indians, who will not admit any person whatever to the participation of their mysteries. Neither the authority nor promises of Akbar could prevail with the Bramins to disclose the tenets of their religion; he was therefore obliged to have recourse to artifice. The stratagem he made use of was to cause a boy, of the name of Feizi, to be committed to the care of these priests, as a poor orphan of the sacerdotal line, who alone could be initiated into the sacred rites of their theology. Feizi, having received the proper instructions for the part he was to act, was conveyed privately to Benares, the seat of knowledge in Indostan; he was received into the house of a learned Bramin, who educated him with the same care as if he had been his own son. After the youth had spent ten years in study, Akbar was desirous of recalling him: but he was struck with the charms of the daughter of his preceptor. The women of the sacerdotal tribe are looked upon as the greatest beauties in Indostan. The old Bramin laid no restraint upon that growing passion of the two lovers: he was fond of Feizi, who had gained his affection by his address and docility; and offered him his daughter in marriage. The young man, divided between love and gratitude, resolved to conceal the fraud no longer; and falling at the feet of the Bramin, discovered the imposture and asked pardon for his offence. The priest, without reproaching him in the least, seized a poniard which hung at his girdle, and was going to plunge it in his breast, if Feizi had not prevented him by taking hold of his arm. The young man used every means to pacify him, and declared himself ready to do any thing to expiate his treachery. The Bramin, bursting into tears, promised to pardon him on condition that he should swear never to translate the *Bedas* or sacred volumes, or disclose to any person whatever the symbol of the Bramin creed. Feizi readily promised all that the Bramin required: how far he kept his word is not known; but the sacred books of the Indians have never been translated by him, or any one else, to this day. As the Bramins

Bramins.

Raynal's
Hist. of the
Indies.

† See Indostan.

Bramins, Brampour. Bramins are the only persons who understand the language of the sacred book, their comments on the text are the same as those that have ever been made on religious books; all the maxims which fancy, interest, passion, or false zeal can suggest, are to be found in these volumes. See the articles SHAFTAH and VEDAM.

They own a supreme God, who created Brama, and gave him a power to create the world. They have also their subaltern deities, their pagods or temples, and idols, whom they fan to defend from flies, dancing before them. They also hold a feast in honour of the sun, considered as the source of light and heat, whereby all nature is fecundified.

Their pagods or temples consist of three parts. The first is a vaulted roof, supported on stone columns: it lies open, and all persons, without distinction, are allowed to enter into it. It is adorned with symbolical figures, made of wood, as elephants, oxen, and horses. The second part is open in the day-time, and shut at night. It is filled with grotesque and monstrous figures, as men with many heads and arms. The third, which is a kind of chancel, is kept always shut, with a very strong gate. In this is placed the statue of the deity to whom the pagod is dedicated. A great number of lamps burn day and night before the idol. The Bramins, before they go into the pagod, pull off their shoes, and leave them at the door.

The Bramins of Siam and Coromandel maintain that the earth will be destroyed by fire; and the former assert that another will arise out of its ashes, in which there shall be no sea, nor any change of seasons, but an eternal spring; and the latter maintain a plurality of worlds, which are alternately destroyed and renewed.

Robert de Nobili, an Italian Jesuit, and one of the Indian missionaries, in the beginning of the 17th century, in order to secure success to his mission, assumed the title and appearance of a Bramin, and at length persuaded the credulous people that he was in reality a member of that venerable order. He forged a deed in the ancient Indian characters, showing that the Bramins of Rome were older than those of India, and that the Jesuits of Rome descended in a direct line from the god Brama. He farther declared on oath, that he derived his origin from this Indian deity. By this imposture he proselyted twelve eminent Bramins, whose influence proved very favourable to his mission. After his death, the Portuguese Jesuits carried on the imposture with very considerable success. These missions, however, were suspended and abandoned in consequence of a papal mandate, issued out in the year 1744, by Benedict XIV. who declared his disapprobation of the artifices that had been used in the conversion of the Indians. See further under the article OBSERVATORY.

BRAMPOUR, or BRAMPORE, a city of Asia, in the dominions of the Great Mogul, and capital of Candish. It formerly stood on as much ground as London; but is now greatly decayed, and chiefly inhabited by Banians. The streets are numerous, but narrow, with low thatched houses made of earth, though a few are covered with varnished tiles. In rainy weather many of the streets are overflowed. In the marketplace is the statue of an elephant in red stone, as big as

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the life. On the other side of the river they have built a new town, which is in a better situation. A great trade is carried on in this town, and throughout all the province, where there is made a prodigious quantity of cotton-cloths, as cotton is in greater plenty here than in any other place of the empire. E. Long. 77. 25. N. Lat. 21. 10.

BRAMPTON, a town of Cumberland in England, seated not far from the Picts wall, and on the river Irthin. It is a very ancient place, but at present is very small. W. Long. 2. 40. N. Lat. 54. 50.

BRAN, the skins or husks of corn, especially wheat ground, separated from the flour by a sieve or boulder. It contains, besides, a portion of the farinaceous matter; this is less glutinous than the finer flour, and is supposed to have a detergent quality; infusions of bran are not unfrequently employed in this intention externally, and sometimes likewise taken inwardly.

Among the ancients, bran was used as an erotic, to excite love. Bran boiled, purges scurf, dandruff, and cleanses the hands in lieu of soap. The dyers reckon it among the not-colouring drugs; and use it for making what they call the *four-waters*, with which they prepare their several dyes. Bran is also used as a medicine for horses. See FARRIERY, § 1. 7.

BRANCH, in botany, an arm of a tree, or a part which, sprouting out from the trunk, helps to form the head or crown thereof. Branches do not spring out of the mere surface of the trunk, but are profoundly rooted therein, so as not only to penetrate the cortical, but also the woody substance, and even the pith. The constituent parts therefore of a *branch* are the same as of the trunk, viz. skin, bark, wood, and pith. See the article PLANTS.

BRANCHES of a Bridle, in the manege, are two pieces of iron bended, which, in the interval between the one and the other, bear the bit-mouth, the cross-chains, and the curb; so that on one end they answer to the head-stall, and on the other to the reins, in order to keep the horse's head in subjection. With regard to their form and structure, branches are either strait, in form of a pistil, for young horses to form their mouth; or after the constable of France's fashion, proper for a horse that carries his head well. Some are in form of a gigot or leg, which will prevent horses from carrying too low: Some are in form of a bent knee, contrived for horses that arm themselves against the operation of the bit; and others after the French fashion, which is hardly above $\frac{1}{2}$ of an inch at the seville hole, and kneed $1\frac{1}{4}$ inch at the jarret or ham.

It is to be observed, 1. That the farther the branch is from the horse's neck, the more effect it will have. 2. That short branches, *ceteris paribus*, are ruder, and their effects more sudden, than those of longer. 3. That the branch is to be proportioned to the length of a horse's neck; and one may sooner err in choosing one too short than too long.

BRANCHES of Ogives, in architecture, are the arches of Gothic vaults. These arches, traversing from one angle to another diagonal-wise, form a cross between the other arches, which make the sides of the square, of which the arches are diagonals.

BRANCH-Stand, with falconers, a term used to signify the making a hawk leap from tree to tree, till the dog springs the game.

3 T

BRANCHER,

Brampton
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Brancher
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Brandenburg.

BRANCHER, among sportsmen, a young hawk, newly taken out of the nest, that can hop from bough to bough.

BRANCHIÆ, in GILLS, in the anatomy of fishes, the parts corresponding to the lungs of land animals. All fishes except the cetaceous ones, and the pteromyzum, which have lungs, are furnished with these organs of respiration. See *COMPARATIVE Anatomy*, n° 160.

BRANCHIDÆ, in Grecian antiquity, priests of the temple of Apollo, which was at Didymus in Ionia, a province of lesser Asia, towards the Ægean sea, upon the frontiers of Caria. They opened to Xerxes the temple of Apollo, the riches whereof he took away. After which, thinking it unsafe to stay in Greece, they fled to Sogdiana, on the other side of the Caspian sea, upon the frontiers of Persia, where they built a city, called by their own name: but they did not escape the punishment of their crime; for Alexander the Great having conquered Darius king of Persia, and being informed of their treachery, put them all to the sword, and razed their city, thus punishing the impiety of the fathers in their posterity.

BRANCHIOSTEGI, in *Ichthyology*, a term used to express one of the general classes of fishes; the characters of which are, that the rays of the fins are of a bony substance; but these fish have no bones or officula at the branchiæ, as the malacopterygious and acanthopterygious fishes all have.

BRANCHON, a town of the Austrian Netherlands, in the province of Namur, seated on the river Mehaigne. E. Long. 4. 40. N. Lat. 50. 32.

BRAND SUNDAY, *Dimanche des Brandons*, in French ecclesiastical writers, denotes the first Sunday in Lent; which is thus called on account of an ancient practice in the Lionnois, where the peasants, in the night of this day, walked about their orchards, gardens, &c. with torches lighted, or fire-brands in their hands; in which plight they visited every tree, and addressing themselves to them one after another, threatened that if they did not bear fruit well the ensuing season, they should be cut down to the ground and burnt. This is evidently a reliet of Paganism; the like of which was practised by the ancient idolaters in the month of February; hence called *Februarius à februario*.

BRANDEIS, a town of Bohemia, seated on the river Elbe. E. Long. 14. 25. N. Lat. 50. 15.

BRANDENBURG (Marquissate of), a large country of Germany, having Mecklenburgh and Pomerania on the north; Poland, on the east; Silesia, with the Lusatias, the electorship of Saxony, Anhalt, and duchy of Magdebourg, on the south; and part of the same duchy, and that of Lunenburg, on the west. Its greatest length is near 200 miles, and its greatest breadth near 100. Its northern situation makes it very cold for seven or eight months in winter. The soil in general is far from being fruitful, a great part of it consisting of sand: yet there are several fruitful spots in it; and the whole, under the last and present reign, has been greatly improved; and much better peopled. In some parts there is great plenty of potatoes and turnips; in others of buck-wheat, millet, and flax; in others of tobacco, woad, and other herbs for dyeing. All sorts of colour-earths, together with alum, salt-

petre, amber, iron, stone, and medicinal springs, are found in it. Abundance of cattle, especially sheep, are bred here; and the woods not only supply the inhabitants with fuel, but with timber, charcoal, tar, and wood-ashes, both for domestic uses and for exportation. The culture of silk also is carried on in this country with great success. The principal rivers by which it is watered are the Elbe, the Oder, the Prignitz, the Havel, the Warthe, and the Spree. Some of the rivers and lakes abound in fish, and are united by canals, for the benefit of navigation. They reckon in the whole Mark 120 towns, above 2500 villages, and about 800,000 inhabitants. The states here consist of the nobility and towns, whose assembly-house is in the Spandau-street at Berlin, and who still enjoy some small remains of their ancient privileges. The hereditary offices of the marquisate are a marshal, chamberlain, cup-bearer, purveyor, sewer, treasurer, and ranger. The king of Prussia, who is also elector of Brandenburg, with his whole court, are Calvinists; but the religion of most of the inhabitants is Lutheranism. The churches of both persuasions are well endowed, and the laity jointly employed by the government. The Roman-catholics are also tolerated here. In short, every inhabitant enjoys full liberty of conscience. A great variety of manufactures, most of which were introduced by the French refugees, are carried on in the marquisate, especially at Berlin and Potsdam; where are also excellent painters, statuaries, and engravers. By means of these manufactures, fabrics, and arts, not only large sums are kept in the country, but also imported from other parts, to which considerable quantities of the manufactures, and natural productions, are exported. For the education of youth, and the advancement of learning, besides Latin schools in several places, and gymnasia, there is an university at Frankfort on the Oder, and an academy of sciences at Berlin.

The Brandenburg family is of great antiquity. Some historians say it was founded by the Sclavonians, who gave it the name of *Branber*, which signifies the "Guards of the Forests;" and the Germans called it *Branburgh*. Henry I. surnamed the Fowler, fortified this place in the year 923, to serve as a rampart against the Huns, a warlike nation, who were extremely troublesome by their frequent incursions. He bestowed the government on Sifroi, Count of Ringelheim, with the title of Margrave or Marquis, which signifies Protector of the Marches or Frontiers, in 923. It descended to Geron, Margrave of Lusatia; which, in succession of time, passed into the families of Staden, Ascania, Bellenstadt, and that of Bavaria, till the Emperor Sigismund, with the consent of the states of the empire in 1416, gave perpetual investiture to Frederick VI. of Nuremberg; who also, the following year, received from the Emperor, at the diet of Constance, the investiture of the country of Brandenburg as Frederick I. having had previously conferred upon him the dignity of elector and arch-chamberlain of the holy Roman empire.

Brandenburg remained long in subjection to Poland; and the investiture of Prussia was granted by the Polish kings to each succeeding margrave. Frederick-William, having concluded a treaty with the king of Poland, was acknowledged to be sovereign of Ducal

Prussia

Brandenburg.

Prussia by an assembly of the states at Königsberg A. D. 1663. By the treaty of Vienna the Emperor confirmed this title; and Frederick, the son of Frederick-William, was proclaimed king of Prussia Jan. 18. 1701. He was succeeded by his son, who performed the greatest services to his country, and prepared the materials of the future grandeur of the late sovereign, Frederick III. who began his reign on the 31st of May 1740, at the age of 28. See PRUSSIA.

Among the electors he possesses the seventh place. As arch-chamberlain, he carries the sceptre before the emperor at his coronation, and brings him water in a silver basin to wash with. In the college of princes of the empire, he has five voices. His assessment, as elector, is 60 horse and 277 foot, or 1828 florins in lieu of them. To the chamber of Wetzlar, his quota is 811 rix-dollars, 58 kruitzers, each term. As to the orders of the knights of the Black Eagle, and of Merit, it is sufficient here to observe, that the former was instituted by Frederic I. at his coronation, and the other by the present king. For the government of this country and the administration of justice, there are several supreme colleges and tribunals; particularly for the departments of war, foreign affairs, and the finances, there are distinct boards. Here is a supreme ecclesiastical council and consistory for the Lutherans; a supreme directory of the Calvinist church; a supreme medicinal college; a supreme mine-office; a college or board of trade, &c. Those of the French nation, settled in this country, are allowed particular courts of their own. The amount of the yearly revenues of the Mark, arising from the domains, protection-money paid by the Jews, tolls, land-tax, mines, forests, duties on stamp-paper, salt, and variety of other imposts and excises, is computed at about 2,500,000 crowns; but the money is said to be much inferior in goodness to that of Saxony and the dominions of Hanover. During the late continental war it was extremely debased. Some estimate the whole number of the inhabitants of the royal and electoral dominions at 5,000,000, and the revenues at about 2,000,000 sterling. Upwards of 100,000 men are kept on foot in time of peace, which are said to cost more than half of the royal revenue. These troops are under strict discipline, very expert at their exercise, always in readiness to march, and always complete. Each regiment has a particular canton or district allotted it for its quarters and raising recruits. The infantry are clothed in blue, and the horse and dragoons in white; and both are required to hear sermon twice a-day when in quarters or garrisons. In time of peace they are allowed, for several months in the year, to hire themselves out, or to follow their business either as burghers or peasants, in the canton where they are quartered; but they are not allowed to marry. A considerable part of these troops are stationed in the Mark, particularly at Berlin and Potsdam. The corps of hussars alone amounts to about 10,000 men. The Mark of Brandenburg is divided, in general, into the electoral and new marks. The former is again subdivided into the old Mark, the Pregnitz, the middle Mark, and the Ucker Mark. The old Mark, which lies on the west side of the Elbe, between that river and Lunenburg, is about 50 miles in length, and 30 in breadth.

BRANDENBURG, a city of Germany, and capital of the marquisate of that name, situated on the river Havel, in E. Long. 13. N. Lat. 52. 25. It is divided into the old and new town, and was anciently the see of a bishop. The mountain in the neighbourhood called *Marienberg*, is planted with vines. Here is a small colony of French Calvinists, with a manufacture of cloth, fustian, and canvas; and a pretty good trade is carried on by the Havel. The fort here looks like a suburb, and contains a riding-school, with the cathedral church. The greatest part also of the members of the chapter which still subsists, and is composed of a Lutheran provost, dean, senior, subsenior, and three other canons, reside in it. They are distinguished by a cross of gold enamelled with violet, terminating in eight points; and have a considerable estate. Near the town is a large lake.

BRANDEUM, in ecclesiastical writers, a linen cloth or veil put over the tombs of the apostles St Peter and St Paul, and left there for some time; by which it is supposed to acquire a degree of sanctity, so as to be worshipped as a relic; and for that purpose frequently sent by the pope as a present to some prince. In this sense, Brandeum amounts to the same with what was otherwise called *sanctuarium*, *fudarium*, *orarium*, and *velum*. The use of brandeum was introduced as a means of diffusing and propagating the virtues and influences of relics, without moving, or any way impairing, the substance of them; the translation of relics in early days being forbidden.

BRANDING, in the face or hand, denotes a punishment inflicted by law on various offences, by burning with a hot-iron, after the offender hath been once admitted to benefit of clergy.

BRANDON, a town of Suffolk in England, seated on a little river Ouse, over which it has a bridge, and a ferry at a mile's distance: whence it is divided into Brandon, and Brandon-ferry; which last has the most business, because commodities are brought thither from the isle of Ely. This place gives the British title of duke to the family of Hamilton in Scotland. E. Long. 0. 55. N. Lat. 52. 30.

BRANDRITH, denotes a trevet or other iron stand, whereon to set a vessel over the fire.

BRANDRITH, among builders, denotes a fence or rail about the mouth of a well.

BRANDT (Gerard), a learned divine of the reformed religion, was born at Amsterdam in 1626, and was successively minister in several places of the Netherlands. He wrote some works which are esteemed, particularly *The History of the reformation of the Netherlands*, 4 vols 4to; and *The life of admiral Ruyter*; both written in the Flemish tongue. He died at Rotterdam in 1685.

BRANDY, a spirituous and inflammable liquor, extracted from wine and other liquors by distillation. See DISTILLATION.

Wine-brandy, made in France, is esteemed the best in Europe. They make it wherever they make wine, and for that purpose use wine that is pricked rather than good wine. The chief brandies for foreign trade, and those accounted best, are the brandies of Bourdeaux, Rochelle, Cogniac, Charenton, the isle of Rhe, Orleans, the county of Blaisois, Poictou, Touraine, Angou, Nantz, Burgundy, and Champaign.

Brandenburg.
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Brandy.

Brank
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Brasil.

† P. 389,
Tab. xxxii.

BRANK, an instrument used in some parts of Scotland, and in Staffordshire, for correcting scolding women. It is a sort of head-piece, which opens and incloses the head of the impatient, while an iron, sharp as a chissel, enters the mouth, and subdues the more dreadful weapon within. Thus harnessed, the offender is led in triumph through the streets. Dr Plott, in his History of Staffordshire, has favoured the world with a minute description and figure of the instrument †, which is there called a *scolding-bridle*; and tells us, he looks upon it "as much to be preferred to the ducking-stool, which not only endangers the health of the party, but also gives the tongue liberty betwixt every dip; to neither of which this is at all liable."

BRANLIN, in ichthyology, a species of salmon, with several transverse black streaks, resembling the impression of so many fingers.

BRANNODUNUM (Notitiæ), with a garrison of the Equites Dalmatæ; a town of Britain, on the Sinus Metaris: now Brancester, in Norfolk, on the Washes.

BRANOGENIUM, or **BRANONIUM**, a town of the Coritani, a people in the heart of Britain: from the distances of the Itinerary, Camden supposes it to be Worcester.

BRANSKA, a town of Transilvania, situated on the river Marish. E. Long. 23. 15. N. Lat. 46. 0.

BRASIDAS, a celebrated general of the Lacedæmonians, about 424 years before the birth of Christ. He defeated the Athenians by land and sea, took many places, and rendered his country formidable to all the neighbouring states. He conquered the Athenians on their attempting to surprise Amphipolis, but died of the wounds he received in that battle. See **ATTICA** and **LACEDEMON**.

BRASIDA, an anniversary solemnity at Sparta, in memory of Brasidas, a Lacedæmonian captain, famous for his achievements at Methone, Pylos, and Amphipolis. It was celebrated with sacrifices and games, wherein none were permitted to contend but free-born Spartans. Whoever neglected to be present at the solemnity was fined.

BRASIL, a large country of South America, being the easternmost part of that continent, lying between the equinoctial line and the tropic of Capricorn. It is about 1560 miles in length, and 1000 in breadth; but, measuring along the coast, it is 2000 miles long, and is bordered with mountains that open from time to time, and form good harbours where vessels may lie in safety. It was accidentally discovered by the Portuguese in 1500. Emanuel king of Portugal had equipped a squadron of 13 sail, carrying 1200 soldiers and sailors destined for the East Indies, under the conduct of Peter Alvarez Cabral. This admiral, quitting Lisbon on the 9th of March 1500, struck out to sea to avoid the coast of Guinea, and steered his course fourthward, that he might the more easily turn the Cape of Good Hope, which projects a good way into the ocean. On the 24th of April, he got sight of the continent of South America, which he judged to be a large island at some distance from the coast of Africa. Coasting along for some time, he ventured to send a boat on shore; and was astonished to observe the inhabitants entirely different from the Africans in features, hair, and complexion. It was found, however, impracticable to seize upon any of the Indians, who retired

with great celerity to the mountains on the approach of the Portuguese; yet, as the sailors had discovered a good harbour, the admiral thought proper to come to an anchor, and called the bay *Puerto Seguro*. Next day he sent another boat on shore, and had the good fortune to lay hold on two of the natives, whom he clothed and treated kindly, and then dismissed, to make a proper report to their countrymen. The stratagem had the desired effect. The Indians, having heard the relation of the prisoners, immediately crowded to the shore, singing, dancing, and sounding horns of different kinds; which induced Cabral to land, and take solemn possession in the name of his Portuguese majesty.

As soon as the court of Lisbon had ordered a survey to be taken of the harbours, bays, rivers, and coasts of Brasil, and was convinced that the country afforded neither gold nor silver, they held it in such contempt, that they sent thither none but condemned criminals and abandoned women. Two ships were sent every year from Portugal, to carry the refuse of the kingdom to this new world, and to bring home parrots and woods for the dyers and cabinet-makers. Ginger was afterwards added; but soon after prohibited, lest it should interfere with the sale of the same article from India.

In 1548, the Jews, many of whom had taken refuge in Portugal, beginning to be persecuted by the inquisition, were stripped of their possessions, and banished to Brasil. Here, however, they were not entirely forsaken. Many of them found kind relations and faithful friends; others, who were known to be men of probity and understanding, obtained money in advance from merchants of different nations with whom they had formerly had transactions. By the assistance of some enterprising men, they were enabled to cultivate sugar-canes, which they first procured from the island of Madeira. Sugar, which till then had been used only in medicine, became an article of luxury. Princes and great men were all eager to procure themselves this new species of indulgence. This circumstance proved favourable to Brasil, and enabled it to extend its sugar plantations. The court of Lisbon, notwithstanding its prejudices, began to be sensible, that a colony might be beneficial to the mother-country, without producing gold or silver; and this settlement, which had been wholly left to the capricious management of the colonists, was now thought to deserve some kind of attention; and accordingly Thomas de Souza was sent thither, in 1549, to regulate and superintend it.

This able governor began by reducing these men, who had always lived in a state of anarchy, into proper subordination, and bringing their scattered plantations closer together; after which he applied himself to acquire some information respecting the natives, with whom he knew he must be incessantly engaged either in traffic or war. This it was no easy matter to accomplish. Brasil was full of small nations, some of which inhabited the forests, and others lived in the plains and along the rivers. Some had settled habitations; but the greater number of them led a roving life, and most of them had no intercourse with each other. It is not to be supposed that such a people would be at all disposed to submit to the yoke which the Portuguese wanted to put upon them on their arrival. At first they only declined all intercourse with these strangers: but finding themselves pursued in order

Brasil.

Brasil. to be made slaves, and to be employed in the labours of the field, they took the resolution to murder and devour all the Europeans they could seize upon. The friends and relations of the savages that were taken prisoners, also ventured to make frequent attempts to rescue them, and were sometimes successful; so that the Portuguese were forced to attend to the double employments of labour and war.

Souza did not bring a sufficient number of forces to change the situation of affairs. Indeed, by building San Salvador, he gave a centre to the colony; but the honour of settling, extending, and making it really useful to the mother-country, was reserved for the Jesuits who attended him. These men, who for their arts of insinuation and address have been equalled by none, dispersed themselves among the Indians. When any of the missionaries were murdered, they were immediately replaced by others; and seeming to be inspired only with sentiments of peace and charity, the Indians, in process of time, grew not only familiar but passionately fond of them. As the missionaries were too few in number to transact all the business themselves, they frequently deputed some of the most intelligent Indians in their stead. These men having distributed hatchets, knives, and looking-glasses, among the savages they met with, represented the Portuguese as a harmless, humane, and good sort of people.

The prosperity of the colony of Brasil, which was visible to all Europe, excited the envy of the French, Spaniards, and Dutch successively. The latter, indeed, bid fairest for the conquest of the whole. Their admiral Henry Lonk arrived, in the beginning of the year 1630, with 46 men of war, on the coast of Fernambucca, one of the largest and best fortified captainships of these parts. He reduced it after several obstinate engagements, in which he was always victorious. The troops he left behind subdued the captainships of Tamaraca, Pareiba, and Rio Grande, in the years 1633, 1634, and 1635. These, as well as Fernambucca, furnished annually a large quantity of sugar, a great deal of wood for dyeing, and other commodities. The Hollanders were so elated with the acquisition of this wealth, which flowed to Amsterdam instead of Lisbon, that they determined to conquer all the Brasils, and entrusted Maurice of Nassau with the conduct of this enterprise. That general reached the place of his destination in the beginning of the year 1637. He found the soldiers so well disciplined, the commanders such experienced men, and so much readiness in all to engage, that he directly took the field. He was successively opposed by Albuquerque, Banjola, Lewis Rocca de Borgia, and the Brasilian Cameron, the idol of his people, passionately fond of the Portuguese, brave, active, cunning, and who wanted no qualification necessary for a general, but to have learned the art of war under able commanders. These several chiefs exerted their utmost efforts to defend the possessions that were under their protection; but their endeavours proved ineffectual. The Dutch seized upon the captainships of Siara, Seregippe, and the greater part of that of Bahia. Seven of the 15 provinces which composed the colony had already submitted to them, and they flattered themselves that one or two campaigns would make them masters of the rest of their enemies' possessions in that part of America; when they were suddenly checked by the

revolution happening on the banishment of Philip IV. and placing the duke of Braganza on the throne. After this, the Portuguese recovering their spirits, soon drove the Dutch out of Brasil, and have continued masters of it ever since.

The country of Brasil is divided into the following provinces, viz. Paria, Maragnano, Siara, Rio Grande, Pareiba, Tamarica, Fernambucca, Seregippe, Bahia, Porto Seguro, Esperito Santo, Rio de Janeiro, Angra, St Vincent, and Del Rey. See these articles.

The first aspect of the country from the sea is rather unfavourable, as it appears high, rough, and unequal; but, on a more narrow inspection, nothing can be more delightful, the eminences being covered with woods, and the valleys and savannahs with the most refreshing verdure. In so vast a tract of land, it cannot be imagined that the climate will be found at all equal, or the seasons uniform. The northern provinces are subject to heavy rains and variable winds, like other countries under the same parallels. Tornadoes, storms, and the utmost fury of the elements, wreak their vengeance here; while the southerly regions are blessed with all the comforts which a fine fertile soil and temperate climate can afford. In some of the provinces, the heat of the climate is thought to prove favourable to the generation of a great variety of poisonous reptiles; some of which, as the *liboya*, or *roebuck* snake, are said to extend to the length of 30 feet, and to be two or three yards in circumference. The rattlesnake, and other reptiles of the same kind, grow likewise to an enormous size; and the serpent called *ibibaboka* is affirmed to be seven yards long, and half a yard in circumference, possessed too of a poison instantaneously fatal to the human race. Here also are scorpions, ant-bears, tigers or maddilloes, porcupines, janonveras, and an animal called *tapirasson*, which is the production of a bull and an ass, having a great resemblance to both. No country on earth affords a greater number of beautiful birds, nor variety of the most exquisite fruits; but the chief commodities are Brasil-wood, ebony, dyeing woods, ambergris, rosin, balsams, indigo, sweetmeats, sugar, tobacco, gold, diamonds, beautiful pebbles, crystal, emeralds, jasper, and other precious stones; in all which the Portuguese carry on such an amazing trade, as may justly be reputed the support, and indeed the vital fountain, of the mother-country. The gold and diamond mines are but a recent discovery: they were first opened in the year 1681; and have since yielded above five millions Sterling annually, of which sum a fifth belongs to the crown. So plentiful are diamonds in this country, that the court of Portugal hath found it necessary to restrain their importation, to prevent too great a diminution of their value. They are neither so hard nor so clear as those of the East Indies, nor do they sparkle so much, but they are whiter. The Brasilian diamonds are sold ten per cent. cheaper than the Oriental ones, supposing the weights to be equal. The largest diamond in the world was sent from Brasil to the king of Portugal. It weighs 1680 carats, or 12½ ounces; and has been valued at L. 56,787,500. Some skilful lapidaries, however, are of opinion that this supposed diamond is only a topaz; in which case a very great abatement must be made in its value. The crown-revenue arising from this colony amounts to two millions Sterling in gold, if we may credit some late writers, besides the duties and customs.

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Brass,

customs on merchandise imported from that quarter. This indeed is more than a fifth of the precious metal produced by the mines; but, every other consequent advantage considered, it probably does not much exceed the truth. The excessive confluence of people to the Brasil colonies, as well from other countries as from Portugal, not only enlarges the imports of gold, but, what is of infinitely more importance to Europe in general, the exportation of the manufactures of this hemisphere; of which the principal are the following. Great Britain sends woollen manufactures; such as fine broad medley cloths, fine Spanish cloths, scarlet and black cloths; serges, duros, druggets, sagathies, shalloons, camblets, and Norwich stuffs; black Colchester bays; says, and perpetuanas called *long ells*; hats, stockings, and gloves. Holland, Germany, and France, chiefly export fine hollands, bone-lace, and fine thread: silk manufactures, pepper, lead, block tin, and other articles, are also sent from different countries. Besides the particulars already specified, England likewise trades with Portugal, for the use of the Brasils, in copper and brass, wrought and unwrought pewter, and all kinds of hardware: all which articles have so enlarged the Portuguese trade, that, instead of 12 ships usually employed in the Brasil commerce, there are now never fewer than 100 sail of large vessels constantly going and returning to those colonies. To all this may be added the vast slave-trade carried on with the coast of Africa for the use of the Brasil colonies; which, we may believe, employs a great number of shipping, from the multitude of slaves that are annually transported. Indeed the commerce of Brasil alone is sufficient to raise Portugal to a considerable height of naval power, as it maintains a constant nursery of seamen: yet a certain infatuation in the policy of the country has prevented that effect even amidst all these extraordinary advantages. All the ships in this trade, being under the direction of the government, have their appointed seasons of going and returning, under convoy of a certain number of men of war; nor can a single ship clear out or go, except with the fleet, but by a special licence from the king, which is seldom granted; though it is easily determined, that such restrictions can prove no way beneficial to the general commerce, though possibly the crown-revenue may be better guarded thereby. The fleets sail in the following order, and at the following stated periods: That to Rio de Janeiro sets sail in January; the fleet to Bahia, or the bay of All Saints, in February; and the third fleet, to Fernambucca, in the month of March.

BRASIL-Wood, or *Brazil-wood*, an American wood of a red colour, and very heavy. It is denominated variously, according to the places from whence it is brought: Thus we have brasil of Fernambucca, Japan, Lamon, &c. For its description, &c. see *CÆSALPINA*.

BRASILETTO, the same with Brasil-wood.

BRASLAW, a considerable town of Poland, in Lithuania, and palatinate of Wilna, with a castle. It is seated on a small lake, in E. Long. 17. 5. N. Lat. 55. 45.

BRASS, or as the French call it, *yellow copper*, is a factitious metal, made of copper and zinc, or lapis calaminaris. See *CHEMISTRY-Index*.

The first formation of brass, as we are assured by scripture, was prior to the flood, and discovered even

in the seventh generation from Adam*. But the use of it was not, as is generally believed, and the Arundelian marbles assert, previous to the knowledge of iron. They were both first known in the same generation, and first wrought by the same discoverer. And the knowledge of them must have been equally carried over the world afterwards, with the spreading of the colonies of the Noachidæ. An acquaintance with the one or the other was absolutely necessary to the existence of the colonists; the clearing away of the woods about their settlements, and the erection of houses for their habitation.

The ancient Britons, though acquainted from the remotest periods with the use of both these metals, remained long ignorant that they were to be obtained in the island. Before this discovery they imported all their iron and brass from the continent. And when they had at length detected the former in their own hills, and had ceased to introduce it, they continued to receive the latter. Their want of the metal remained, and no mines of it were opened in the island. In the earliest ages, whose manners have been delineated by history, we find the weapons of their warriors invariably framed of this factitious metal; and the most authentic of all the profane records of antiquity, the Arundelian marbles, for that reason, mistakenly date the first discovery of iron a couple of centuries below the Trojan war. Every military nation, as such, is naturally studious of brightness in its arms; and the Britons, particularly, gloried in the neatness of theirs. For this reason the nations of the world still fabricated their arms of brass, even long after the Arundelian era for the discovery of iron; and the Britons continued to import it from the continent, though they had found iron to be a native of the country, and could have supplied themselves with a sufficient quantity of it.

Mr Whitaker† supposes, that when the Britons derived their iron and brass from the continent, they purchased the latter at an easier expence than the former. The Gauls had many large brass works carried on in the kingdom, but seem to have had but few iron forges within it. And this would naturally induce the Belgæ to be less diligent in their inquiry after the veins of copper and calamine at home, than for the courses of iron ore; though the one was equally discoverable in the island as the other, and lay equally within the Belgic regions of it. Brass being thus cheaper than iron, they necessarily formed with it some domestic as well as military implements. Such were common among the Gauls; and such were familiar to the Britons, either imported into the island, as some actually were, or manufactured within it, as others also assuredly were. The Britons had certainly brass foundaries erected among them, and minted money, and fabricated weapons of brass.

In this condition of the works, the Romans entered the island. And seeing so great a demand among the natives for this article, they would speedily instruct them to discover the materials of it among themselves. This must unavoidably have resulted from the conquest of the Romans. The power of surprising their new subjects with so unexpected a discovery would naturally stimulate the pride of the Roman intellect; and the desire of obliging themselves with so cheap a supply of that useful metal, stationary as they were in that kingdom, would also equally actuate the selfishness of

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Brass. the Roman brass. The veins of copper and calamine would be easily found out by an experienced inquirer after them; and the former metal is therefore distinguished among the Welsh, only by the Roman appellation of *cyprium*, *kopp* or copper. And many founderies of brass appear to have been established in the island. Some had been erected before, one perhaps within the confines of every kingdom, and probably in the vicinity of every capital. One at least would be necessary, in order to supply the armoury of the principality: and one perhaps was sufficient for most of the British states. But several appear now to have been settled in every kingdom, and one perhaps near every stationary town. Two have been discovered in the single county of Essex, and within a narrow portion of it at Fildes and Danbury. And a third was placed upon Easterly Moor in Yorkshire, 12 miles to the north-west of York, and in the neighbourhood of Ilkium or Aldborough.

Corinthian Brass, famous in antiquity, is a mixture of gold, silver, and copper. L. Mummius having sacked and burnt the city of Corinth, 146 years before Christ, it is said this metal was formed from the immense quantities of gold, silver, and copper, wherewith that city abounded, thus melted and run together by the violence of the conflagration.

Brass, in the glass trade.—Thrice calcined brass is a preparation which serves the glassmen to give many very beautiful colours to their metal. The manner of preparing it is this: Place thin plates of brass on tiles on the leet of the furnace near the occhis; let it stand to be calcined there for four days, and it will become a black powder sticking together in lumps. Powder this, sift it fine, and recalcine it four or five days more; it will not then stick together, but remain a loose powder, of a russet colour. This is to be calcined a third time in the same manner; but great care must be taken in the third calcination, that it be not overdone nor underdone; the way to be certain when it is right is, to try it several times in glass while melting. If it makes it, when well purified, to swell, boil, and rise, it is properly calcined; if not, it requires longer time. This makes, according to the different proportions in which it is used, a sea-green, an emerald-green, or a turcoise colour.

Brass, by long calcination alone, and without any mixture, affords a fine blue or green colour for glass; but they have a method of calcining it also with powdered brimstone, so as to make it afford a red, a yellow, or a chalcedony colour, according to the quantity and other variations in the using it. The method of making the calcination is this: Cut thin plates of brass into small pieces with shears, and lay them stratum super stratum, with alternate beds of powdered sulphur, in a crucible; calcine this for 24 hours in a strong fire: then powder and sift the whole; and finally expose this powder upon tiles for 12 days to a reverberating furnace; at the end of this time, powder it fine, and keep it for use. The glass-makers have also a method of procuring a red powder from brass, by a more simple calcination, which serves them for many colours. The method of preparing it is this: They put small and thin plates of brass into the arches of the glass furnaces, and leave them there till they are sufficiently calcined, which the heat in that place, not being enough to melt

them, does in great perfection. The calcined matter powdered, is of a dusky red, and requires no farther preparation.

Brass-Colour, one prepared by the braziers and colour-men to imitate brass. There are two sorts of it; the red brass or bronze, and the yellow or gilt brass: the latter is made only of copper-filings, the smallest and brightest that can be found; with the former they mix some red ochre, finely pulverized; they are both used with varnish.—In order to make a fine brass that will not take any rust or verdigris, it must be dried with a chafing-dish of coals as soon as it is applied.—The finest brass-colour is made with powder brass imported from Germany, diluted into a varnish, made and used after the following manner: The varnish is composed of one pound four ounces of spirit of wine, two ounces of gum-lac, and two ounces of sandarac; these two last drugs are pulverized separately, and afterwards put to dissolve in spirit of wine, taking care to fill the bottle but half full. The varnish being made, you mix such quantity as you please of it with the pulverized brass, and apply it with a small brush to what you would brass over. But you must not mix too much at once, because the varnish being very apt to dry, you would not have time to employ it all soon enough; it is therefore better to make the mixture at several times. After this manner they brass over figures of plaster, which look as well as if they were of cast brass.

Brass-Leaf is made of copper, beaten out into very thin plates, and afterwards rendered yellow. The German artists, particularly those of Nuremberg and Augsburg, are said to possess the best method of giving to these thin plates of copper a fine yellow colour like gold, by simply exposing them to the fumes of zinc, without any real mixture of it with the metal. These plates are cut into little pieces, and then beaten out fine like leaves of gold; after which they are put into books of coarse paper, and sold at a low price for the vulgar kinds of gilding. The parings or shreds of these very thin yellow leaves being well ground on a marble plate, are reduced to a powder similar to gold; which serves to cover, by means of gum-water or some other glutinous fluid, the surface of various mouldings or pieces of curious workmanship, giving them the appearance of real bronze, and even of fine gold, at a very trifling expence, because the gold colour of this metallic powder may be easily raised and improved by stirring it on a wide earthen basin over a slow fire.

Brass-Lumps, a common name given by miners to the globular pyrites. See PYRITES.

BRASSAW, or **CRONSTADT**, a strong town of Transilvania in Burezland; seated on the river Buxel, in E. Long. 22. 35. N. Lat. 46. 30.

BRASSE, in ichthyology, a species of **PERCA**.

BRASSICA, **CABBAGE**: A genus of the *siliquosa* order, belonging to the *tetradynamia* class of plants; and in the natural method ranking under the 39th order, *Siliquose*. The calyx is erect and converging; the seeds are globular; the gland between the shorter stamina and the pistillum, and between the longer ones and the calyx. There are 12 species. 1. The *orientalis*, with heart-shaped, smooth leaves embracing the stem, and four-cornered capsules. 2. The *campestris*, with a slender root and stem, the leaves being uniform, heart-shaped, and sessile. 3. The *arvensis*, with scalloped leaves

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Brassica. leaves embracing the stem; the highest heart-shaped, and most entire. 4. The alpina, with the radical leaves egg-shaped, and erect petals. 5. The napus, with the root-stem spindle-shaped. 6. The rassa, with the radical stem growing orbicular, depressed, and fleshy. 7. The oleracea, with the radical stem growing columnar and fleshy. 8. The chinensis, with very entire oval leaves; the floral leaves lanceolated and embracing the stem; the calyxes longer than the claw of the petals. 9. The violacea, with lanceolated, egg-shaped, smooth, undivided, and dentated.

In these species the style is obtuse; in the following ensiform. 10. The erucastrum, with runcinate leaves, a hispid stem, and polished capsules. 11. The eruca, with lyrated leaves, shaggy stem, and smooth capsules. 12. The vesicaria, with runcinate leaves, and hispid capsules covered with a tumid calyx.

Culture, &c. The second sort never varies. It grows naturally on the sea-shore near Dover. It hath a perennial branching stalk, in which it differs from all the other species. In very severe winters, when the other sorts are destroyed, this is a necessary plant, for the most severe frosts do not injure it. The flower-stalks grow from the end of the branches, and spread out horizontally; but those which arise from the centre of the plants grow erect, and seldom put out branches. The cauliflower has been much more improved in Britain than in any other part of Europe. In France they rarely have cauliflowers till Michaelmas, and Holland is generally supplied with them from Britain. In many parts of Germany there were none of them cultivated till within a few years past, and most parts of Europe are supplied with seeds from Britain. The eighth sort, which is generally known by the title of *rape* or *cole-seed*, is much cultivated in the isle of Ely, and some other parts of England, for its seed, from which rape-oil is drawn; and it hath also been cultivated of late years, in other places, for feeding of cattle, to great advantage. The cole seed, when cultivated for feeding of cattle, should be sown about the middle of June. The ground for this should be prepared for it in the same manner as for turnips. The quantity of seeds for an acre of land is from six to eight pounds; and as the price of the seed is not great, so it is better to allow eight pounds; for if the plants are too close in any part, they may be easily thinned when the ground is hoed, which must be performed in the same manner as is practised for turnips, with this difference only, of leaving these much nearer together; for as they have fibrous roots and slender stalks, so they do not require near so much room. These plants should have a second hoeing about five or six weeks after the first, which, if well performed in dry weather, will entirely destroy the weeds, so they will require no farther culture. Where there is not an immediate want of food, these plants had better be kept as a reserve for hard weather, or spring seed, when there may be a scarcity of other green food. If the heads are cut off, and the stalks left in the ground, they will shoot again early in the spring, and produce a good second crop in April; which may be either fed off, or permitted to run to seeds, as is the practice where this is cultivated for the seeds: but if the first is fed down, there should be care taken that the cattle do not destroy their stems, or pull them out of the ground. As this plant is so hardy as not to be de-

stroyed by frost, so it is of great service in hard winters for feeding of ewes; for when the ground is so hard frozen as that turnips cannot be taken up, these plants may be cut off for a constant supply. This will afford late food after the turnips are run to seed; and if it is afterwards permitted to stand for seed, one acre will produce as much as, at a moderate computation, will sell for five pounds, clear of charges. Partridges, pheasants, turkeys, and most other fowl, are very fond of this plant; so that wherever it is cultivated, if there are any birds in the neighbourhood, they will constantly lie among these plants. The seeds of this plant are sown in gardens for winter and spring fallads, this being one of the small fallad herbs.

The common white, red, flat, and long-sided cabbages, are chiefly cultivated for autumn and winter use; the seeds of these sorts must be sown the beginning or middle of April, in beds of good fresh earth; and when the young plants have about eight leaves, they should be pricked out into shady borders, about three or four inches square, that they may acquire strength, and to prevent their growing long shanked. About the middle of June you must transplant them out, where they are to remain. If they are planted for a full crop in a clear spot of ground, the distance from row to row should be three feet and an half, and in the rows two feet and an half asunder: if the season should prove dry when they are transplanted out, you must water them every other evening until they have taken fresh root; and afterwards, as the plants advance in height, you should draw the earth about the stems with a hoe, which will keep the earth moist about their roots, and greatly strengthen the plants. These cabbages will some of them be fit for use soon after Michaelmas, and will continue until the end of February, if they are not destroyed by bad weather; to prevent which, the gardeners near London pull up their cabbages in November, and trench their ground up in ridges, laying their cabbages against their ridges as close as possible on one side, burying their stems in the ground: in this manner they let them remain till after Christmas, when they cut them for the market; and although the outer part of the cabbage be decayed (as is often the case in very wet or hard winters), yet, if the cabbages were large and hard when laid, the inside will remain sound.

The Russian cabbage was formerly in much greater esteem than at present, it being now only to be found in particular gentlemens gardens, who cultivate it for their own use. This must be sown late in the spring of the year, and managed as those before directed, with this difference only, that these must be sooner planted out, and must have an open clear spot of ground, and require much less distance every way, for it is but a very small hard cabbage. This sort will not continue long before they will break and run up to seed.

The early and sugar-loaf cabbages are commonly sown for summer use, and are what the gardeners about London commonly call *Michaelmas cabbages*. The season for sowing of these is about the end of July, or beginning of August, in an open spot of ground; and when the plants have got eight leaves, you must prick them into beds at about three or four inches distance every way, that the plants may grow strong and short shanked; and toward the end of October you should plant them out: the distance that these require is, three

Brassica. feet row from row, and two feet and a half asunder in the rows. The ground must be kept clean from weeds, and the earth drawn up about your cabbage plants. In May, if your plants were of the early kind, they will turn in their leaves for cabbaging; at which time, the gardeners near London, in order to obtain them a little sooner, tie in their leaves close with a slender osier-twig to blanch their middle; by which means, they have them at least a fortnight sooner than they could have if they were left untied.

The early cabbage being the first, we should choose to plant the fewer of them, and a greater quantity of the sugar-loaf kind, which comes after them; for the early kind will not supply the kitchen long, generally cabbaging apace when they begin, and as soon grow hard and burst open; but the sugar-loaf kind is longer before it comes, and is as slow in its cabbaging; and being of an hollow kind, will continue for a good long time. The sugar-loaf kind may be planted out in February, and will succeed as well as if planted earlier; with this difference only, that they will be later before they cabbage. You should also reserve some plants of the early kind in some well-sheltered spot of ground, to supply your plantation, in case of a defect; for in mild winters many of the plants are apt to run to seed, especially when their seeds are sown too early, and in severe winters they are often destroyed.

The Savoy cabbages are propagated for winter use, as being generally esteemed the better when pinched by the frost: these must be sown about the end of April, and treated after the manner as was directed for the common white cabbage; with this difference that these may be planted at a closer distance than those; two feet and an half square will be sufficient. These are always much better when planted in an open situation, which is clear from trees and hedges; for in close places they are very subject to be eaten almost up by caterpillars and other vermin, especially if the autumn prove dry.

The broccoli may also be treated in the same manner, but need not be planted above one foot asunder in the rows, and the rows two feet distance; these are never eaten till the frost hath rendered them tender; for otherwise they are tough and bitter.

The seeds of the broccoli (of which there are several kinds, viz. the Roman or purple, the Neapolitan or white, and the black broccoli, with some others, but the Roman is preferred to them all), should be sown about the latter end of May, or beginning of June, and when the plants are grown to have eight leaves, transplant them into beds (as was directed for the common cabbage); and toward the latter end of July they will be fit to plant out, which should be done into some well-sheltered spot of ground, but not under the drip of trees: the distance these require is about a foot and a half in the rows, and two feet row from row. The soil in which they should be planted ought to be rather light than heavy: if your plants succeed well (as there will be little reason to doubt, unless the winter prove extremely hard), they will begin to show their small heads, which are somewhat like a cauliflower, but of a purple colour, about the end of December, and will continue eatable till the middle of April. The brown or black broccoli is by many persons greatly esteemed, though it doth not deserve a place in the kitchen-garden where the Roman broccoli can be obtained, which is much

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Brassica. sweeter, and will continue longer in season: indeed, the brown sort is much hardier, so that it will thrive in the coldest situations, where the Roman broccoli is sometimes destroyed in very hard winters. The brown sort should be sown in the middle of May, and managed as hath been directed for the common cabbage, and should be planted at the same distance, which is about two feet and an half asunder. This will grow very tall, so should have the earth drawn up to their stems as they advance in height. This doth not form heads so perfect as the Roman broccoli; the stems and hearts of the plants are the parts which are eaten. The Roman broccoli (if well managed) will have large heads, which appear in the centre of the plants like clusters of buds. These heads should be cut before they run up to seed, with about four or five inches of the stem; the skin of these stems should be stripped off before they are boiled. After the first heads are cut off, there will be a great number of side-shoots produced from the stems, which will have small heads to them, but are full as well flavoured as the large. The Naples broccoli hath white heads very like those of the cauliflower, and eats so like it as not to be distinguished from it.—Besides this first crop of broccoli (which is usually sown in the end of May), it will be proper to sow another crop the beginning of July, which will come in to supply the table the latter end of March and the beginning of April; and being very young, will be extremely tender and sweet.

In order to save good seeds of this kind of broccoli, you should reserve a few of the largest heads of the first crop, which should be let remain to run up to seed, and all the under shoots should be constantly stripped off, leaving only the main stem to flower and seed. If this be duly observed, and no other sort of cabbage permitted to seed near them, the seeds will be as good as those procured from abroad, and the sort may be preserved in perfection many years.

The turnip-rooted cabbage was formerly more cultivated in Britain than at present; for since other sorts have been introduced which are much better flavoured, this sort has been neglected. There are some persons who esteem this kind for soups, but it is too strong for most palates; and is seldom good but in hard winters, which will render it tender and less strong. At the end of June the plants should be transplanted out where they are to remain, allowing them two feet distance every way, observing to water them until they have taken root; and as their stems advance, the earth should be drawn up to them with a hoe, which will preserve a moisture about their roots, and prevent their stems from drying and growing woody, so that the plants will grow more freely; but it should not be drawn very high, for as it is the globular part of the stalk which is eaten, so that should not be covered. In winter they will be fit for use, when they should be cut off, and the stalks pulled out of the ground and thrown away, being good for nothing after the stems are cut off. As food for cattle, however, the cultivation of this species deserves particular attention. See AGRICULTURE, no 170.

The curled colewort or Siberian broccoli is now more generally esteemed than the former, being extremely hardy, so is never injured by cold, but is always sweeter in severe winters than in mild seasons. This

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may be propagated by sowing of the seeds the beginning of July; and when the plants are strong enough for transplanting, they should be planted in rows about a foot and a half asunder, and ten inches distance in the rows. These will be fit for use after Christmas, and continue good until April, so that they are very useful in a family.

The musk cabbage. This may be propagated in the same manner as the common cabbage, and should be allowed the same distance: it will be fit for use in October, November, and December; but, if the winter proves hard, these will be destroyed much sooner than the common sort.

The common colewort or Dorsetshire kale, is now almost lost near London, where their markets are usually supplied with cabbage plants instead of them. The best method to cultivate this plant in the fields is, to sow the seeds about the beginning of July, choosing a moist season, which will bring up the plants in about ten days or a fortnight; the quantity of seed for an acre of land is nine pounds: when the plants have got five or six leaves they should be hoed, as is practised for turnips, cutting down all the weeds from amongst the plants, and also thinning the plants where they are too thick; but they should be kept thicker than turnips, because they are more in danger of being destroyed by the fly: this work should be performed in dry weather, that the weeds may be killed. About six weeks after, the plants should have a second hoeing, which, if carefully performed in dry weather, will entirely destroy the weeds, and make the ground clean, so that they will require no farther culture: in the spring they may be either drawn up and carried out to feed the cattle, or they may be turned in to feed upon them as they stand; but the former method is to be preferred, because there will be little waste; whereas, when the cattle are turned in amongst the plants, they will tread down and destroy more than they eat, especially if they are not fenced off by hurdles.

The two last sorts of cabbages are varieties fit for a botanic garden, but are plants of no use. They are annual plants, and perish when they have perfected their seeds.

The best method to save the seeds of all the sorts of cabbages is, about the end of November you should make choice of some of your best cabbages, which you should pull up, and carry to some shed or other covered place, where you should hang them up for three or four days by their stalks, that the water may drain from between their leaves; then plant them in some border near a hedge or pale, quite down to the middle of the cabbage, leaving only the upper part of the cabbage above ground, observing to raise the earth above it, so that it may stand a little above the level of the ground; especially if the ground is wet, they will require to be raised pretty much above the surface. If the winter should prove very hard, you must lay a little straw or pease haulm lightly upon them, to secure them from the frost, taking it off as often as the weather proves mild, lest by keeping them too close they should rot. In the spring of the year these cabbages will shoot out strongly, and divide into a great number of small branches: you must therefore support their stems, to prevent their being broken off by the wind; and if the weather should be very hot and dry when they are in

flower, you should refresh them with water once a-week all over the branches, which will greatly promote their feeding, and preserve them from mildew. When the pods begin to change brown, you will do well to cut off the extreme part of every shoot with the pods, which will strengthen your seeds; for it is generally observed, that those seeds which grow near the top of the shoots, are very subject to run to seed before they cabbage; so that by this there will be no loss, but a great advantage. When your seeds begin to ripen, you must be particularly careful that the birds do not destroy it, for they are very fond of these seeds. The best method to prevent this, is to get a quantity of birdlime, and dawb over a parcel of slender twigs, which should be fastened at each end to stronger sticks, and placed near the upper part of the seed in different places, so that the birds may alight upon them, by which means they will be fastened thereto; where you must let them remain, if they cannot get off themselves: and although there should not above two or three birds be caught, yet it will sufficiently terrify the rest, that they will not come to that place again for a considerable time after.

When your seed is fully ripe, you must cut it off; and after drying, thresh it out, and preserve it in bags for use.

But in planting of cabbages for seed, it will be proper never to plant more than one sort in a place, or near one another: for example, never plant red and white cabbages near each other, nor Savoy with white or red cabbages; for they will, by the commixture of their effluvia, produce a mixture of kinds: and it is said to be owing to this neglect, that the gardeners rarely save any good red cabbage seed in Britain, but are obliged to procure fresh seeds from abroad; as supposing the soil or climate of Britain alters them from red to white, and of a mixed kind betwixt both; whereas, if they should plant red cabbages by themselves for seeds, and not suffer any other to be near them, they might continue the kind as good in Britain as in any other part of the world.

Cauliflowers have of late years been so far improved in Britain, as to exceed in goodness and magnitude what are produced in most parts of Europe, and by the skill of the gardener are continued for several months together; but the most common season for the great crop is in May, June, and July. Having procured a parcel of good seed, you must sow it about the 21st of August, upon an old cucumber or melon-bed, sifting a little earth over the seeds, about a quarter of an inch thick; and if the weather should prove extremely hot and dry, you should shade the beds with mats, to prevent the earth from drying too fast, and give it gentle waterings as you may see occasion. In about a month's time after sowing, your plants will be fit to prick out: you should therefore put some fresh earth upon your cucumber or melon beds; or where these are not to be had, some beds should be made with a little new dung, which should be trodden down close, to prevent the worms from getting through it; but it should not be hot dung, which would be hurtful to the plants at this season, especially if it proves hot; into this bed you should prick your young plants at about two inches square, observing to shade and water them at first planting; but do not water them too much after they are growing.

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growing, nor suffer them to receive too much rain if the season should prove wet, which would be apt to make them black shanked, as the gardeners term it, which is no less than a rottenness in their stems, and is the destruction of the plants so affected. In this bed they should continue till about the 30th of October, when they must be removed into the place where they are to remain during the winter season; which, for the first sowing, is commonly under bell or hand glasses, to have early cauliflowers, and these should be of an early kind: but in order to have a succession during the season, you should be provided with another more late kind, which should be sown four or five days after the other, and managed as was directed for them. In order to have very early cauliflowers, you should make choice of a good rich spot of ground that is well defended from the north, east, and west winds, with hedges, pales, or walls; but the first are to be preferred, if made with reeds, because the winds will fall dead in these, and not reverberate as by pales or walls. This ground should be well trenched, burying therein a good quantity of rotten dung; then level your ground, and if it be naturally a wet soil, you should raise it up in beds about two feet and an half, or three feet broad, and four inches above the level of the ground; but if your ground is moderately dry, you need not raise it at all: then plant your plants, allowing about two feet six inches distance from glass to glass in the rows, always putting two good plants under each glass, which may be at about four inches from each other; and if you design them for a full crop, they may be three feet and an half row from row: but if you intend to make ridges for cucumbers between the rows of cauliflower plants (as is generally practised by the gardeners near London), you must then make your rows about eight feet asunder; and the ground between the rows of cauliflowers may be planted with cabbage plants, to be drawn off for coleworts in the spring. When you have planted your plants, if the ground is very dry, you should give them a little water, and then set your glasses over them, which may remain quite close down over them till they have taken root, which will be in about a week or ten days time, unless there should be a kindly shower of rain; in which case you may set off the glasses, that the plants may receive the benefit of it; and in about ten days after planting, you should be provided with a parcel of forked sticks or bricks, with which you should raise your glasses about three or four inches on the side toward the south, that your plants may have free air: in this manner your glasses should remain over the plants night and day, unless in frosty weather, when you should set them down as close as possible; or if the weather should prove very warm, which many times happens in November, and sometimes in December, in this case you should keep your glasses off in the day-time, and put them on only in the night, lest, by keeping the glasses over them too much, you should draw them into flower at that season; which is many times the case in mild winters, especially if unskillfully managed. Toward the latter end of February, if the weather proves mild, you should prepare another good spot of ground to remove some of the plants into, from under the glasses, which should be well dunged and trenched (as before): then set off your glasses; and, after making choice of one of the

most promising plants under each glass, which should remain, take away the other plant, by raising it up with a trowel, &c. so as to preserve as much earth to the root as possible; but take care not to disturb or prejudice the roots of the plants which remain. Then plant the plants which you have taken out at the distance before directed, viz. if for a full crop, three feet and a half, row from row; but if for ridges of cucumbers between them, eight feet, and two feet four inches distance in the rows: then, with a small hoe, draw the earth up to the stems of the plants which were left under the glasses, taking great care not to let the earth fall into their hearts; and set your glasses over them again, raising your props an inch or two higher than before, to give them more air, observing to take them off whenever there may be some gentle showers, which will greatly refresh the plants.

In a little time after, if you find your plants grow so fast as to fill the glasses with their leaves, you should then slightly dig about the plants, and raise the ground about them in a bed broad enough for the glasses to stand, about four inches high, which will give your plants a great deal of room, by raising the glasses so much higher when they are set over them; and by this means they might be kept covered until April, which otherwise they could not, without prejudice to the leaves of the plants; and this is a great advantage to them, for many times we have returns of severe frosts at the latter end of March, which prove very hurtful to these plants, if exposed thereto, especially after having been nursed up under glasses.

After you have finished your beds, you may set your glasses over your plants again, observing to raise your props pretty high, especially if the weather be mild, that they may have free air to strengthen them; and in mild soft weather set off your glasses, as also in gentle showers of rain; and now you must begin to harden them by degrees to endure the open air; however, it is advisable to let your glasses remain over them as long as possible, if the nights should be frosty, which will greatly forward your plants; but you must not let your glasses remain upon them in very hot sun-shine, especially if their leaves press against the sides of the glasses; for it hath often been observed in such cases, that the moisture which hath risen from the ground, together with the perspiration of the plants, which by the glasses remaining over them hath been detained upon the leaves of the plants, when the sun hath shone hot upon the sides of the glasses, have acquired such a powerful heat from the beams thereof, as to scald all their larger leaves, to the no small prejudice of the plants: nay, sometimes large quantities of plants have been so affected therewith, as never to be worth any thing after.

If your plants have succeeded well, toward the end of April some of them will begin to fruit: you must therefore look over them carefully every other day, and when you see the flower plainly appear, you must break down some of the inner leaves over it to guard it from the sun, which would make the flower yellow and unsightly if exposed thereto; and when you find your flower at its full bigness (which you may know by its outside parting as if it would run), you must then draw it out of the ground, and not cut them off, leaving the stalk in the ground, as is by some practised;

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and if they are designed for present use, you may cut them out of their leaves; but if designed to keep, you should preserve their leaves about them, and put them into a cool place; the best time for pulling them is in a morning, before the sun hath exhale the moisture; for cauliflowers pulled in the heat of the day, lose that firmness which they naturally have, and become tough.

But to return to our second crop (the plants being raised and managed as was directed for the early crop, until the end of October), you must then prepare some beds, either to be covered with glass-frames, or arched over with hoops, to be covered with mats, &c. These beds should have some dung laid at the bottom, about six inches or a foot thick, according to the size of your plants; for if they are small, the bed should be thicker of dung to bring them forward, and so *vice versa*; this dung should be beat down close with a fork, in order to prevent the worms from finding their way through it; then lay some good fresh earth about four or five inches thick thereon, in which you should plant your plants about two inches and a half square, observing to shade and water them until they have taken new root: but you must not keep your coverings close, for the warmth of the dung will occasion a large damp in the bed, which, if pent in, will greatly injure the plants. When your plants have taken root, you must give them as much free open air as possible, by keeping the glasses off in the day-time as much as the weather will permit; and in the night or at such times as the glasses require to be kept on, raise them up with props to let in fresh air, unless in frosty weather; at which time the glasses should be covered with mats, straw, pease-haulm, &c. but this is not to be done but in very hard frosts; you must also observe to guard them against great rain, which in winter time is very hurtful to them, but in mild weather, if the glasses are kept on, they should be propped to admit fresh air; and if the under leaves grow yellow and decay, be sure to pick them off: for if the weather should prove very bad in winter, so that you should be obliged to keep them close covered for two or three days together, as it sometimes happens, these decayed leaves will render the inclosed air very noxious; and the plants perspiring pretty much at that time, are often destroyed in vast quantities.

In the beginning of February, if the weather be mild, you must begin to harden your plants by degrees, that they may be prepared for transplantation: the ground where you intend to plant your cauliflowers out (which should be quite open from trees, &c. and rather moist than dry), having been well dunged and dug, should be sown with radishes a week or fortnight before you intend to plant out your cauliflowers; the sowing of radishes is particularly mentioned, because if there are not some radishes amongst them, and the month of May should prove hot and dry, as it sometimes happens, the fly will seize your cauliflowers, and eat their leaves full of holes, to their prejudice, and sometimes their destruction; whereas, if there are radishes upon the spot, the flies will take to them, and never meddle with the cauliflowers so long as they last: indeed, the gardeners near London mix spinach with their radish-seed, and so have a double crop; which is an advantage where ground is dear, or where persons are straitened for room; otherwise it is very well to have only one crop

amongst the cauliflowers, that the ground may be cleared in time.

Your ground being ready and the season good, about the middle of February you may begin to plant out your cauliflowers; the distance which is generally allowed by the gardeners near London (who plant other crops between their cauliflowers to succeed them, as cucumbers for pickling, and winter cabbages (is every other row four feet and a half apart, and the intermediate rows two feet and a half, and two feet two inches distance in the rows; so that in the latter end of May or beginning of June (when the radishes and spinach are cleared off), they put in seeds of cucumbers for pickling, in the middle of the wide rows, at three feet and a half apart; and in the narrow rows plant cabbages for winter use, at two feet two inches distance, so that these stand each of them exactly in the middle of the square between four cauliflower plants; and these after the cauliflowers are gone off, will have full room to grow, and the crop be hereby continued in a succession through the the whole season.

There are many people who are very fond of watering cauliflower plants in summer; but the gardeners near London have almost wholly laid aside this practice, as finding a deal of trouble and charge to little purpose; for if the ground be so very dry as not to produce tolerable good cauliflowers without water, it seldom happens that watering of them makes them much better; and when once they have been watered, if it is not constantly continued, it had been much better for them if they never had any; as also, if it be given them in the middle of the day, it rather helps to scald them: so that, upon the whole, if care be taken to keep the earth drawn up to their stems, and clear them from every thing that grows near them, that they may have free open air, you will find that they will succeed better without than with water, where any of these cautions are not strictly observed.

But in order to have a third crop of cauliflowers, you should make a slender hot-bed in February, in which you should sow the seeds, covering them a quarter of an inch thick with light mould, and covering the bed with glass-frames. When the plants are come up, and have gotten four or five leaves, you should prepare another hot-bed to prick them into, which may be about two inches square; and in the beginning of April harden them by degrees, to fit them for transplanting, which should be done the middle of that month, at the distance directed for the second crop, and must be managed accordingly: these (if the soil is moist where they are planted, or the season cool and moist) will produce good cauliflowers about a month after the second crop is gone, whereby their season will be greatly prolonged.

There is also a fourth crop of cauliflowers, which is raised by sowing the seed about the 23d of May; and being transplanted, as hath been before directed, will produce good cauliflowers in a kindly season and good soil after Michaelmas, and continue through October and November, and if the season permit often a great part of December.

All the species of cabbage are supposed to be hard of digestion, to afford little nourishment, and to produce flatulencies, though probably on no very good foundation. They tend strongly to putrefaction, and
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Brassicavit run into this state sooner than almost any other vegetable; when putrefied, their smell is likewise the most offensive, greatly resembling that of putrefied animal substances. A decoction of them is said to loosen the belly. Of all these plants cauliflower is reckoned the easiest of digestion. The white is the most fetid, and the red most emollient or laxative; a decoction of this last is recommended for softening acrimonious humours in some disorders of the breast, and in hoarseness. The red cabbage is chiefly used for pickling. In some countries they bury the white cabbage when full grown in the autumn, and thus preserve it all winter. The Germans cut them to pieces, and, along with some aromatic herbs and salt, press them close down in a tub where they soon ferment, and are eaten under the name of *Sour-cROUT*. See that article.

BRASSICAVIT, or **BRACHICAVIT**, in the manege, is a horse whose fore-legs are naturally bended archwise: being so called by way of distinction from an arched horse whose legs are bowed by hard labour.

BRAULS, Indian cloths with blue and white stripes. They are otherwise called *turbants*, because they serve to cover those ornaments of the head, particularly on the coast of Africa.

BRAUN (George), in Latin *Braunius*, archdeacon of Dortmund, and dean of Notre Dame in Grubus, at Cologne. He published a Latin oration against the priests guilty of fornication; he also wrote the life of Jesus Christ, that of the Holy Virgin, and a controversial treatise against the Protestants: but his chief work is the *Theatrum Urbium*, in several volumes folio.

BRAUNA, a town of Germany, in Bavaria, seated on the river Inn. It has a strong fortress: notwithstanding, it was taken by the Austrians in 1743. E. Long. 13. 3. N. Lat. 48. 10.

BRAUNSBURG, a town of Poland, in Regal Prussia, with a very commodious harbour, and belonging to the king of Prussia. It is seated near the Baltic sea, in E. Long. 20. 0. N. Lat. 54. 15.

BRAUNSFELD, a town of Germany, in the circle of the Upper Rhine, and country of Solmes, with a handsome palace or castle. E. Long. 8. 32. N. Lat. 50. 22.

BRAVO, one of the Cape de Verd islands on the coast of Africa, remarkable for its excellent wines, and inhabited by Portuguese. The land is very high, and consists of mountains which look like pyramids. It abounds in Indian corn, gourds, water-melons, potatoes, horses, asses, and hogs. There is also plenty of fish on the coast, and the island produces salt-petre. W. Long. 25. 35. N. Lat. 14. 0.

BRAVO, a town of Africa, on the coast of Ajan, with a pretty good harbour. It is an independent place, and is about 80 miles distant from Magadoxo. E. Long. 41. 35. N. Lat. 1. 0.

BRAURONIA, in Grecian antiquity, a festival in honour of Diana, surnamed *Brauronia*, from its having been observed at Brauron, an Athenian borough. This festival was celebrated once in five years, being managed by ten men, called in Greek [*icropoioi*]. The victim offered in sacrifice was a goat, and it was customary for certain men to sing one of Homer's *Iliads*. The most remarkable persons at this solemnity were young virgins, habited in yellow gowns, and conse-

crated to Diana. It was unlawful for any of them to be above ten or under five years of age.

BRAWN, the flesh of a boar souced or pickled: for which end the boar should be old; because the older he is, the more horny will the brawn be.—The method of preparing brawn is as follows: The boar being killed, it is the flitches only, without the legs, that are made brawn; the bones of which are to be taken out, and then the flesh sprinkled with salt, and laid in a tray, that the blood may drain off: Then it is to be salted a little, and rolled up as hard as possible. The length of the collar of brawn should be as much as one side of the boar will bear, so that when rolled up it will be nine or ten inches diameter.

The collar being thus rolled up, is to be boiled in a copper, or large kettle, till it is so tender, that you can run a straw through it; then set it by till it is thorough cold, and put it into the following pickle. To every gallon of water, put a handful or two of salt, and as much wheat-bran: Boil them together, then drain the bran as clear as you can from the liquor; and when the liquor is quite cold, put the brawn into it.

BRAY (Sir Reginald), a celebrated architect and politician, was the second son of Sir Richard Bray, one of the privy council to king Henry VI. Sir Reginald was instrumental in the advancement of king Henry VII. to the throne of England; and was greatly in the favours of that prince, who bestowed honours and wealth upon him. His skill in architecture appears from Henry VII.'s chapel at Westminster, and the chapel of St George at Windsor, as he had a principal concern and direction in the building of the former, and the finishing and bringing to perfection the latter, to which he was also a liberal benefactor. In the middle of the south aisle of the above chapel is a spacious chapel built by him, and still called by his name. He died in 1501; and was interred in the above chapel, probably under the stone where lies Dr Waterland; for, on opening the vault for that gentleman, who died in 1740, a leaden coffin of ancient form was found, which, by other appearances, was judged to be that of Sir Reginald, and was, by order of the dean, immediately arched over.

BRAY (Dr Thomas), an eminent, learned, and pious divine, was born at Marton, in Shropshire, in the year 1656, and educated at Oxford. He was at length presented to the vicarage of Over-Whitacre, in Warwickshire: and in 1690, to the rectory of Sheldon, where he composed his *Catechetical Lectures*; which procured him such reputation, that Dr Compton, bishop of London, pitched upon him as a proper person to model the infant church of Maryland, and establish it upon a solid foundation, and for that purpose he was invested with the office of commissary. He now engaged in several noble undertakings. He procured sums to be raised for purchasing small libraries for the use of the poor ministers in the several parts of our plantations: and the better to promote this design, he published two books; one intitled *Bibliotheca parochialis*, or a scheme of such theological and other heads as seem requisite to be perused or occasionally consulted by the clergy, together with a catalogue of books which may be profitably read on each of those points; the other, *Apostolical charity*, its nature and excellency considered.

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Brawn,
Bray.

Bray
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He endeavoured to get a fund established for the propagation of the gospel, especially among the uncultivated Indians; and by his means a patent was obtained for erecting the corporation called *The Society for the propagation of the gospel*. He, by his industry, procured relief for prisoners; and formed the plan for the society for the reformation of manners, charity-schools, &c. He wrote, 1. his *Martyrology*, or papal usurpation, in one volume folio; 2. *Directorium missionarium*; and other works. This excellent man died in 1730, aged 73.

BRAY, a port town of Ireland, in the county of Wicklow, and province of Leinster, seated on St George's channel, eight miles south of Dublin. W. Long. 6. 16. N. Lat. 53. 8.

BRAY sur Seine, a town of France, in Champagne, and in Senonois, on the confines of Brie. E. Long. 2. 15. N. Lat. 48. 35.

BRAYLE, among sportsmen, a piece of leather slit to put upon the hawk's wing, to tie it up.

BRAZED, in heraldry, a term serving to describe three cheverons, one clasping another.

BRAZEN, something consisting of brass, or formed out of it. See BRASS.

BRAZEN Age. See AGE.

BRAZEN Dish, among miners, is the standard by which the other dishes are gauged, and is kept in the king's hall.

BRAZEN Sea, in Jewish antiquity, one of the sacred utensils in the temple of Solomon. It was cast in the plain of Jordan, and removed from thence into the inner court of the temple; where it was placed upon 12 oxen, three of which looked towards each quarter of the world. It was ten cubits from the one brim to the other, five cubits in height, and 30 cubits in circumference, and contained 3000 baths. The brim of it was perfectly round, and so it continued in the two upper cubits; but below the brim, in the three lower cubits, it was square. It was a hand-breadth thick, and the brim was wrought like the brim of a cup, with flowers of lilies. About the body of this huge vessel there were two borders of engravings, being the heads of oxen in demi-relief; out of which some suppose the water issued, and that they were made as cocks and conveyances for that purpose.—This brazen or molten sea, was designed for the priests to wash themselves in before they performed the service of the temple. The supply of water was through a pipe out of the well Etam; though some are of opinion, that it was constantly supplied with water by the Gibeonites.

BRAZIER, an artificer who makes and deals in all kinds of brass ware. This trade, as exercised in Britain, may be reckoned a branch of the smithery, though they seldom keep forges, except for brazing or foldering, and tinning the insides of their vessels, which they work up chiefly out of copper and brass prepared rough to their hands. They consist of a working part, and a shop-keeping part, which latter many carry on to a great extent, dealing as well in all sorts of iron and steel, as copper and brass goods for household furniture; and lately have fallen much into selling what is called *French plate*, made of a sort of white metal, silvered and polished to such a degree that the eye cannot soon distinguish it from real silver.

BRAZIL. See BRASIL.

BRAZING, the foldering or joining two pieces of iron together by means of thin plates of brass, melted between the pieces that are to be joined. If the work be very fine, as when two leaves of a broken saw are to be brazed together, they cover it with pulverized borax, melted with water, that it may incorporate with the brass powder, which is added to it: The piece is then exposed to the fire without touching the coals, and heated till the brass is seen to run.

BRAZING is also the joining two pieces of iron together by beating them hot, the one upon the other, which is used for large pieces by farriers, &c.

BRAZZA, a town and island on the coast of Dalmatia, in the gulph of Venice, opposite to Spalatto, and subject to Venice. E. Long. 28. 0. N. Lat. 43. 0.

BREACH, in a general sense, denotes a break or rupture in some part of a fence or inclosure whether owing to time or violence.—Inundations, or overflowings of lands, are frequently owing to breaches in the dikes or sea-banks. Dagenham breach is famous; it was made in 1707, by a failure of the Thames wall in a very high tide. The force wherewith it burst in upon the neighbouring level tore up a large channel or passage for water 100 yards wide, and in some places 20 feet deep, by which a multitude of subterraneous trees that had been buried many ages before were laid bare.

BREACH, in fortification, a gape made in any part of the works of a town by the cannon or mines of the besiegers, in order to make an attack upon the place. To make the attack more difficult, the besieged sow the breach with crow-feet, or stop it with *chevaux de frize*.—A practicable breach, is that where the men may mount and make a lodgment, and ought to be 15 or 20 fathoms wide. The besiegers make their way to it, by covering themselves with gabions, earth-bags, &c.

BREACH, in a legal sense, is where a person breaks through the condition of a bond or covenant; on an action upon which, the breach must be assigned: And this assignment must not be general, but particular, as, in an action of covenant for not repairing houses, it ought to be assigned particularly what is the want of reparation: and in such certain manner, that the defendant may take an issue.

BREAD, a mass of dough kneaded and baked in an oven. See BAKER, BAKING, and BARM.

The grains of all vegetables are almost entirely composed of substances very proper for the nourishment of animals; and amongst grains those which contain a farinaceous matter are the most agreeable and most nutritive. Macquer's Chem. Dict.

Man who appears to be designed by nature to eat of all substances which are capable of nourishing him, and still more of vegetables than animals, has, from time immemorial, and in all parts of the earth, used farinaceous grains as the principal basis of his food: but as these grains cannot be without difficulty eaten by men in their natural state, this active and intelligent animal has gradually found means not only to extract the farinaceous part, that is, the only nutritive part of these grains, but also to prepare it so that it becomes a very agreeable and wholesome aliment, such as the bread we now generally eat.

Nothing appears so easy at first sight as to grind corn.

Brazing
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Bread.

Bread. corn, to make a paste with the flour and water, and to bake this paste in an oven. They who are accustomed to enjoy the advantages of the finest human inventions, without reflecting on the labour it has cost to complete them, think all these operations common and trivial. However, it appears very certain, that for a long time men no otherwise prepared their corn than by boiling and forming compact viscous cakes, not very agreeable to the taste, and of difficult digestion, before they were able to make bread of good taste and quality, as we have now. It was necessary to invent and complete ingenious machines for grinding corn, and separating the pure flour with little trouble and labour; and that inquiries or rather some happy chance, which some observing person availed himself of, should discover, that flour, mixed with a certain quantity of water, is susceptible of a fermentation which almost entirely destroys its viscosity, heightens its taste, and renders it proper to make a light bread, very agreeable to the taste, and of easy digestion.

This essential operation, on which the good quality of bread depends, is entirely of the province of chemistry. It would add to the honour of the ancient cultivators of chemistry, to attribute to them so useful and important a discovery; but, unhappily, it is too probable that they had no share in it. The ancient chemists were engaged in other pursuits than that of bread and other common objects. They hoped to make gold; and what is bread in comparison with gold?

However that be, to the fortunate invention of raising the paste before baking we owe the perfection of the art of making bread. This operation consists in keeping some paste or dough, till by a peculiar spirituous fermentation it swells, rarefies, and acquires a smell and taste quick, pungent, spirituous, somewhat sour, and rather disagreeable. This fermented dough is well worked with some fresh dough, which is by that mixture and moderate heat disposed to a similar but less advanced fermentation than that above mentioned. By this fermentation the dough is attenuated, and divided; air is introduced into it, which being incapable of disengaging itself from the tenacious and solid paste, forms in it small cavities, raises and swells it: hence the small quantity of fermented paste which disposes the rest to ferment, is called *leaven* from the French word *lever*, signifying to raise.

When the dough is thus raised, it is in a proper state to be put into the oven; where, while it is baked, it dilates itself still more by the rarefaction of the air, and of the spirituous substance it contains, and it forms a bread full of eyes or cavities, consequently light, and entirely different from the heavy, compact, viscous, and indigested masses made by baking unfermented dough.

The invention of beer, or wine of grains, furnishes a new matter useful in the making of bread. This matter is the froth which forms upon the surface of these liquors during fermentation. When it is mixed with dough, it raises it better and more quickly than ordinary leaven. It is called *yeast* or *barm*. By means of this, the finest lightest bread is made. It often happens, that bread made with leaven dough has a sourish and not agreeable taste; which may proceed

Bread. from too great a quantity of leaven, or from leaven in which the fermentation has advanced too far. This inconvenience does not happen to bread made with yeast; because the fermentation of this substance is not too far advanced, or because more attention is given to that finer bread.

It may be asked, Why since dough is capable of fermenting spontaneously and singly, as we see from the leaven, a substance is added to dispose it to ferment? The true reason is, That all the parts of a fermenting substance do not ferment at the same time, nor to the same degree; so that some parts of this substance have finished their fermentation, while others have not yet begun. The fermentable liquors which contain much sugar, as hydromel, and must of wines, give proofs of this truth; for, after these liquors have become very vinous, they have still very distinctly a saccharine taste: but all saccharine matter is still susceptible of fermentation: and, in fact, if vinous hydromel, or must, or even new beer, be distilled, so that all their ardent spirit shall be separated, and the residuums diluted with water, we shall see a second fermentation take place, and a new quantity of ardent spirit formed.

The same thing precisely happens to dough, and still more sensibly, from its viscosity and want of fluidity; so that if it be left to ferment alone, and without the help of leaven, as the fermentation proceeds very slowly and successively, the parts which ferment first will have become sour and vapid before all the rest be sufficiently attenuated and changed, by which the bread will acquire a disagreeable taste.

A mixture of a small quantity of leaven with dough effectually prevents this inconvenience; because the effect of this leaven, and of all fermenting substances, is to dispose to a similar fermentation all matters capable of it, with which it is mixed; or rather, by means of leaven, the fermentation of all the parts of such substances is effected more nearly at the same time.

Bread well raised and baked differs from unfermented bread, not only in being less compact, lighter, and of a more agreeable taste, but also in being more easily miscible with water, with which it does not form a viscous mass, which circumstance is of great importance in digestion.

It is observable, that without bread, or somewhat of this form, no nation seems to live. Thus the Laplanders, having no corn of their own, make a sort of bread of their dried fishes, and of the inner rind of the pine, which seems to be used, not so much for their nourishment as for supplying a dry food. For this mankind seem to have an universal appetite, rejecting bland, slippery, and mucilaginous foods. This is not commonly accounted for, but seems to depend on very simple principles. The preparation of our food depends on the mixture of the animal fluids in every stage. Among others the saliva is necessary, which requires dry food as a necessary stimulus to draw it forth, as bland, slippery, fluid aliments are too inert, and make too short stay in the mouth, to produce this effect, or to cause a sufficient degree of manducation to emulge that liquor. For this reason we commonly use dry bread along with animal food, which otherwise would be too quickly swallowed. For blending the oil and water of our food nothing is so fit as bread, assisted by a previous manducation. For which purpose, bread is of like necessity.

*Cullen on the
Mat. Med.*

Bread.

lity in the stomach, as it is proper that a substance of solid consistence should be long retained there. Now the animal fluids must be mixed with our aliments, in order to change the acescency it undergoes. But liquid foods would not attain this end, whereas the solid stimulates and emulges the glands of the stomach. The bread then appears to be exceedingly proper, being bulky without too much solidity, and firm without difficulty of solution.

Suppl. to Chambers's Dict.

Among the ancients we meet with various denominations of bread; as, 1. *Panis filigenous*, called also *mundus*, *athleticus*, *isungia*, *coliphus*, and *robys*, answering to our white bread; being made of the purest flour of the best wheat, and only used by the richer sort. 2. *Panis secundus* or *secundarius*, called also *smilaceus* or *smilagineus*, the next in purity; being made of fine flour, only all the bran not sifted out. 3. *Autopyrus*, called also *syncomistus* and *confusaneus*, made of the whole substance of the wheat, without either retrenching the finer flour or coarser bran; answering to our household bread. 4. *Cacabaceus*, apparently the same with what was otherwise denominated *sordidus*, as being given to dogs; *furfuraceus*, *furfureus*, or *furfurativus*, because made in great part of bran; and, in the middle age, *bissus*, on account of its brownness; sometimes also *leibo*. There were other sorts of bread, denominated from the manner in which they were made, or the uses they were applied to; as, 1. The *militaris*, which was prepared by the soldiers and officers in camp with their own hands; for which purpose some had hand-mills, others pounded the corn in a mortar, and baked it on the coals. 2. *Clibanites*, that baked in an oven, by way of contradistinction from that baked on the hearth or under the embers. 3. That called *subcineritius*, or *sub cinere coctus*; sometimes also *reverfatus*, because it was to be turned in the baking. 4. *Nauticus*, answering to our sea-biscuit, and denominated accordingly *bis coctus*, because baked several times over to make it keep the longer. Other kinds of bread were denominated from their qualities and accidents; as, 1. The *panis foccus*, that which had been long baked; such as were the *bis coctus*, naval and buccellated bread. 2. *Madidus*, a sort made of rye or bear, sometimes also made of fine flour, wherewith they smeared their faces, by way of a cosmetic, to render them smooth. 3. *Acidus*, or sour bread, which was acidulated with vinegar. 4. *Azymus*, that unleavened or unfermented.

The French have also a great variety of breads; as queen's bread, alamode bread, bread de Segovie, de Gentillay, quality bread, &c. all prepared in peculiar manners by the bakers of Paris. The bread de Gonesse excels all others, on account of the waters at Gonesse, a town three leagues from Paris. It is light, and full of eyes, which are the marks of its goodness. *Pain de menage*, is that which each family bakes for itself. Spice-bread, *pain d'epice*, denotes bread baked and iced over with the scum taken off sugar in refining houses; it is sometimes also made with honey and other sorts of seasoning, and answers to what the ancients call *panis mel-litus*.

Among us, bread is chiefly divided into white, wheaten, and household; differing only in degrees of purity. In the first, all the bran is separated; in the second, only the coarser; in the third, none at all: so

that fine bread is made only of flour; wheaten bread, of flour and a mixture of the finer bran; and household, of the whole substance of the grain, without taking out either the coarse bran or fine flour. We also meet with symnel bread, manchet, or roll bread, and French bread: which are only so many denominations of the finest and whitest bread, made of the purest flour; except that in ill-roll bread there is an addition of milk; and in French bread, of eggs and butter also. In Lancashire, and several of the northern counties of England, they have several sorts of oaten bread; as, 1. The bannock, which is an oat-cake, kneaded only with water, and baked on the embers. 2. Clap-bread, which is made into thin hard cakes. 3. Bitchiness bread, which is made of thin batter, and made into thin soft oat-cakes. 4. Riddle-cakes, which are thick and sour, have but little leaven, and are kneaded stiff. And, 5. Jan-nock, which is oaten bread made up into loaves. Add to these, *pease-bread*, much used in many parts of Scotland; being bread consisting either wholly of the flour of pease, or of this and oat-meal mixed: the dough, sometimes leavened, sometimes made only with water, is formed either in bannocks or cakes, and baked over the embers; or into what they call *baps*, i. e. a kind of flattish rolls, and baked in the oven. In the statute of assize of bread and ale, 51 Hen. III. mention is made of wastel-bread, cocket-bread, and bread of treet; which answer to the three kinds of bread now in use, called *white*, *wheaten*, and *household* bread. In religious houses, they heretofore distinguished bread by the names Esquires bread, *panis armigerorum*; monks bread, *panis conventualis*; boys bread, *panis puerorum*; and servants bread, *panis famulorum*, called also *panis servientalis*. A like distribution obtained in the households of nobles and princes; where, however, we find some other denominations; as messengers bread, *panis nuncius*, that given to messengers as a reward of their labour; court-bread, *panis curialis*, that allowed by the lord for the maintenance of his household; eleemosynary bread, that distributed to the poor by way of alms.

It is for the interest of the community that the food of the poor should be as various as possible, that, in time of dearth and scarcity of the ordinary kinds, they may not be without ready and cheap resources. To the discovery of such resources several benevolent philosophers having successfully turned their inquiries, we shall lay before the reader the result of their experiments.

1. *BREAD of Potatoes**. Potatoes, previously deprived of their skin, cut into thin slices, and put between paper, will dry in a heat somewhat less than 35° of Reaumur's thermometer; and, when thus dried, they will preserve their white colour. By this process they lose about two thirds of their weight, and they may then be reduced to a fine powder. A little of this powder thrown upon the fire sends out a smoke, accompanied with a smell resembling burnt bread. As this smell is perceived from all farinaceous vegetables when treated in the same manner, Mr Parmentier thinks it may be considered as the characteristic of the presence of an amylaceous † matter. This smell does not, however, he observes, arise from the amylaceous or fibrous part parately, but from both taken together. The powder of potatoes, obtained in the manner described above, has the smell and taste of wheat; and, like it, is devoured

Bread.

From
Examen
Chymique des
Pommes de
Terre, &c.
par M. Par-
mentier, a-
poth. major
del hotel des
invalides
Paris.

† See the
note infra.

Bread.

voured by rats and mice: but, even when most finely powdered, it has not the feel or brightness of the flour of wheat; although, on a chemical analysis, it yields the same products. It is also nutritious, and keeps well for a long time.

Finding so great a similarity between the meal of wheat and what may be called the meal of potatoes, Mr Parmentier next endeavoured to make bread of them when mixed in different proportions. His trials were made with one fourth, one third, one half, and two thirds, of the potato-meal, the remainder being flour from wheat. These proportions, with the addition of a little salt and yeast, yielded bread which was well tasted, but which had fermented little, was brown, and covered with hard brown crusts. Bread made from the meal of potatoes alone, with the addition of salt and yeast, was eatable, but very heavy, unfermented, and exceedingly brown. This bread, from the meal of potatoes alone, was apt to crumble into powder. To give it more adhesion, he mixed with the meal a decoction of bran, or a mixture of honey and water; either of which made it lighter and more fermented: it obtained also a crust of a golden colour, became well tasted, and sufficiently adhesive. Mr Parmentier obtained bread also, well fermented, and of a good colour and taste, from a mixture of raw potato-pulp with meal of wheat, or potato-meal, with the addition of yeast and salt.

Potatoes, when used for making bread, are not readily disposed to ferment; without which, bread is very insipid, and not easily digested. But Mr Parmentier found, from a variety of experiments, that good bread might be made from equal quantities of flour and potato-meal. He concludes, therefore, with recommending the mixture of potatoes, in times of scarcity, with the flour of wheat, instead of employing rye, barley, or oats, as has frequently been done.

When grain is altogether wanting, he recommends the use of bread made from a mixture of the amylaceous powder of potatoes and of their pulp, this mixture being fermented with leaven or with honey. The meal of this root, when diluted with hot water, acquires a tenaceous and gluey consistence. However fair the meal of potatoes may be, it always gives a grey colour to the bread made by mixing it with the flour of wheat: but a mixture of the pulp of potatoes with the flour of wheat does not produce brown-coloured bread.

Mr Parmentier made bread, very much like that of wheat, by a mixture of the following four substances, viz. four ounces of amylaceous powder of potatoes, one dram of mucilage extracted from barley, one dram of

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the bran of rye, and a dram and a half of glutinous matter dried and powdered.

2. *BREAD from different Vegetables not commonly in Use* *. Although horse-chestnut has not hitherto been employed, yet it is certain that wholesome bread, without any bitterness, may be obtained from it. Mr Parmentier advises, that the fruit, after the skin is taken off, and the juice pressed from it, be made into a paste. This mass must be diluted in water, and then strained through a sieve. A milky-coloured liquor is thus separated, which, on standing, deposits a fine powder. This being dried, is without either smell or taste, and very fit for aliment; the mass from which it is procured retaining the bitterness of the fruit.

The roots of the bryona, when treated in the same manner, yielded a similar white powder. By the same treatment also, fine, white, insipid, inodorous powders may be procured from the roots of the iris, gladiolus, ranunculus, fumaria, arum, dracunculus, mandragora, colchicum, filipendula, and helleborus; plants which grow spontaneously, and in great abundance.

Of acorns bread has frequently been made: and to this day, in some countries, they are in common use. The method of preparation which Mr Parmentier recommends is, that they be deprived of their cover by boiling, then dried and powdered, and afterwards baked in the same manner as the flour of wheat. When fully ripe, and made into a paste, they were deprived of their astringency by merely pressing their juice from them. The mass remaining after the pressure, when dried, was easily reduced to a fine powder by no means disagreeable.

The gramen caninum arvense, in its appearance, approaches to corn; and some naturalists have considered it as the original species from which all our grain is produced. Its roots are sweet-tasted, and have long been employed in making ptisans. In the preparation of them for bread, it is only necessary that the roots should be cleansed, cut small, dried, and pounded. This powder, Mr Parmentier observes, does not dissolve in cold water or spirits; but it does in boiling water, which it renders thick and cloudy, and, upon cooling, the whole mass obtains a gelatinous consistence. Upon a chemical analysis, it yields an acid empyreumatic oil, which possesses a singular odour, resembling that which is perceived on burning the plant. The spongy residuum, calcined in the air, gives a fixed alkali. These properties incontestably prove, that it contains an amylaceous (A) matter similar to that of grain, which appears to be the nutritive part of vegetables. This amylaceous

3 X

(A) M. Beccari of the Bolognian academy has discovered in the flour of wheat two distinct substances. The one he terms an *animal* or *glutinous* matter; the other, an *amylaceous* matter or *vegetable paste*.

The *gluten* has been supposed to be the nutritive part of corn, from its not dissolving unless in vegetable acids; from its assuming a spongy form in boiling water; from its supposed analogy to the animal lymph; and, lastly, from the similitude which the products it affords, on a chemical analysis, bear to those obtained from animal substances. M. Parmentier, however, from various experiments, was led to conclude, with the celebrated Model of Petersburg, that the gluten or animal matter of Beccari exists in the bran, and is not the nutritive part of the wheat. Having made experiments with four different kinds of flour, it appeared that the quantity of animal matter was always proportioned to the coarseness of the flour. Hence, were this gluten the nutritive part, the coarsest bread, or that which contained most bran, would afford the greatest quantity of nourishment. The contrary of this, however, is now known to be fact.

The *amylaceous* part, or, as some have termed it, the *fecula*, of wheat and other vegetables, is a peculiar gum, not

Bread. laceous matter, formed into a jelly, and diffused in water, keeps for a long time without suffering any change; it then turns acid, and at length putrefies.

The amylaceous matter of acrid and poisonous plants, although innocent and nutritive, cannot be converted into bread without the addition of some mucilaginous substance. In times of great scarcity, common bran will answer the purpose; but when potatoes are to be had, the addition of a proper proportion of these is to be preferred.

Mr Parmentier gives an account of the bread which he obtained from the amylaceous powders of the different vegetables mentioned above, with the addition of potatoes and a small quantity of common leaven of grain. This bread appeared in general to be well fermented; it was of a good white colour, and free from any disagreeable odour: but to the taste, it was somewhat insipid; which, however, he imagines, might have been corrected by the addition of a proper quantity of salt.

As the resources against scarcity here pointed out can be procured only at particular seasons, the author proposes a method for preserving the matter thus obtained. For this purpose, he advises, that bread prepared in the manner mentioned above should be carefully dried, reduced to powder, and then kept in a close cask. By this means, he is of opinion that it may be preserved for a very long time, and will always be ready to make an agreeable and wholesome panada by the addition of a little butter and salt.

Mr Parmentier, in order to discover the degree of power wherewith this alimentary powder nourished, made himself the subject of experiment; and found, that three ounces of it for dinner, and as much for supper, made into panada with water, was a sufficient quantity of aliment for a day. From his discharge by stool while he used it, he had reason to believe that it is almost totally alimentary. He concludes with recommending it not only as useful in times of scarcity, but as a proper substitute for sea-biscuit, and as a species of food well adapted for armies and hospitals.

3. *Cheap method of making wholesome BREAD*, when wheat-flour is dear, by mixing turnip with it*.

* From a letter in the *Museum Rusticum et Commerciale*. "At the time I tried this method, bread was very dear, insomuch that the poor people, in the country where I live, can hardly afford themselves half a meal a-day. This put me upon considering whether some cheaper method might not be found than making it of wheat-meal. Turnips were at that time very plentiful. I had a number of them pulled, washed clean, pared, and boiled; when they were become soft enough to mash, I had the greatest part of the water pressed out of them, and afterwards had them mixed with an equal quantity in weight of coarse wheat-meal; the

dough was then made in the usual manner, with yeast or barm, salt, water, &c. It rose very well in the trough; and after being well kneaded, was formed into loaves, and put into the oven to be baked. I had at the same time some other bread made with common meal in the ordinary way. I baked my turnip-bread rather longer than the other. When they were drawn from the oven, I caused a loaf of each sort to be cut; and found, on examination, the turnip-bread was sweeter than the other, to the full as light and as white, but had a little taste (though nowise disagreeable) of the turnip. Twelve hours afterwards I tasted my turnip-bread again, when I found the taste of the turnip in it scarce perceivable, and the smell quite gone off. On examining it when it had been baked 24 hours, had I not known that there were turnips in its composition, I should not have imagined it: it had, it is true, a peculiar sweetish taste, but by no means disagreeable; on the contrary, I rather preferred it to the bread made of wheat-meal alone. After it had been baked 48 hours, it underwent another examination, when it appeared to me to be rather superior to the other; it eat fresher and moister, and had not at all abated in its good qualities: to be short, it was still very good after a week; and, as far as I could see, kept as well as the bread made of common wheat-meal.

"In my trials of this bread by the taste, I was not satisfied with eating it by itself; I had some of it spread with butter; I tasted it with cheese; I ate of it toasted and buttered, and finally in boiled milk and in soup: in all these forms it was very palatable and good.

BREAD in medicine. Besides the alimentary, bread has also medical, qualities.—Decoctions, creams, and jellies of bread, are directed in some dispensaries. Bread carefully toasted, and infused or lightly boiled in water, imparts a deep colour, and a sufficiently agreeable restraining taste. This liquor, taken as common drink, has done good service in a weak lax state of the stomach and intestines; and in bilious vomiting and purging, or the cholera morbus: examples are related in the Edinburgh essays of several cases of this kind cured by it, without the use of any other medicine.—In Westphalia there is a very coarse bread eaten, which still retains the opprobrious name given it by a French traveller of *Bonpournickel*, "good for his horse *Nickel*," It is the same with what the Romans called *panis furfuraceus*, or *panis impurus*, from its not being cleansed from the husk; and *panis ater*, from the blackness of its colour: though we learn from Pliny, that the Romans for 300 years knew no other bread. The Germans * make two sorts of waters by distillation from this bread; the one with, the other without, the addition of a spirituous liquor: to both which great virtues are ascribed. That without

not soluble in spirit of wine, vinegar, or cold water. It contains more acid, and less water, than the ordinary gums. It is found in many of those plants that make the nourishment of men and other animals. Hence Mr Parmentier concludes it to be the nutritive matter.

Though we are not to consider the glutinous matter as the nutritious part of vegetables, yet it is a very necessary ingredient. It is that which preserves the cohesion of the paste in fermenting bread: it is that which forms the viscid pellicle, and stops the air in fermentation; gives the savoury taste to bread; occasions it to be light, to ferment, and which forms the small cells seen in it. It is found especially near the cortical part of grain; and this accounts for its being found in the greatest quantity in coarse brown meal. It is this gluten which renders wheat a superior aliment to the other grains and roots.

Bread.

without any thing spirituous, is made out of the juice of craw-fish, may-dew, rose-water, nutmegs, and saffron, distilled from a large quantity of this bread. This is esteemed a great restorative, and given in hectic habits. The other is distilled from this bread and Rhenish wine, with nutmegs and cinnamon. This is given in all the disorders of the stomach, vomiting, loss of appetite, and other complaints of the same kind: and besides these, there is a spirit distilled from it by the retort in the dry way, which, when separated from its fetid oil, is esteemed a powerful sudorific, and very valuable medicine in removing impurities of the blood.

• Boyle's

Phil. Works

abridged,

vol. III.

p. 572.

† Ibid. vol. I.

p. 34, 45.

‡ From the

German E-

phemerides,

1764.

Bread is also medicinal, applied *externally*, as is vulgarly known*. Mr Boyle assures us he drew a menstruum from bread stronger than aquafortis, and which would act even upon glass itself †.

BREAD Tree. See ARTOCARPUS.

Bees BREAD. See BEE, n^o 12.

Cassada BREAD. See JATROPHA.

Earth BREAD ‡. "In the lordship of Moscow in the Upper Lusatia, a sort of white earth is found, of which the poor, urged by the calamities of the wars which raged in those parts, make bread. It is taken out of a hill where they formerly worked at saltpetre. When the sun has somewhat warmed this earth, it cracks, and small white globules proceed from it as meal; it does not ferment alone, but only when mixed with meal. Mr Sarlitz, a Saxon gentleman, was pleased to inform us, that he has seen persons who in a great measure lived upon it for some time. He assures us that he procured bread to be made of this earth alone, and of different mixtures of earth and meal; and that he even kept some of this bread by him upwards of six years: he further says, a Spaniard told him, that this earth is also found near Geronne in Catalonia."

Eucharist or Sacramental BREAD, in the Protestant churches, is common leavened bread, in conformity to the ancient practice. In the Romish mass, azymous or unleavened bread is used, particularly in the Gallican church, where a sort is provided for this purpose called *pain a chanter*, made of the purest wheaten flour pressed between two iron plates graven like wafer-moulds, being first rubbed with white wax to prevent the paste from sticking. The Greeks observe divers ceremonies in their making the eucharist bread. It is necessary the person who bakes it have not lain with his wife the day before; or, if it be a woman, that she have not conversed with her husband. The Abyssinians have an apartment in their churches for this service, being a kind of sacristy. F. Sirmond, in his disquisition on azymous bread, shows from the council of Toledo, that anciently there were as many ceremonies used in the Latin church in the preparation of their unleavened bread as are still retained in the eastern churches. He cites the example of Queen Radegonda, who distributed with her own hands in the church, the bread which she herself had made. It appears also from the dispute of cardinal Humbert against the Greeks, that in the Latin church no bread was used for the eucharist, but what was taken out of the sacristy, and had been made by the deacons, subdeacons, and even priests, who rehearsed several psalms during the process.

Ecclesiastical writers enumerate other species of bread allotted for purposes of religion; as, 1. *Calendarius*,

that anciently offered to the priest at the kalends.

2. *Prebendarius*, the same with *capitularis*, that distributed daily to each prebendary or canon. 3. *Benedictus*, that usually given to catechumens before baptism, in lieu of the eucharistic bread, which they were incapable of partaking of. The *panis benedictus*, was called also *panagium* and *eulogium*, being a sort of bread blessed and consecrated by the priest, whereby to prepare the catechumens for the reception of the body of Christ. The same was used afterwards, not only by catechumens, but by believers themselves, as a token of their mutual communion and friendship. Its origin is dated from the 7th century, at the council at Nantz. In the Gallican church we still find *panis benedictus*, *pain benit*, used for that offered for benediction, and afterwards distributed to pious persons who attend divine service in chapels. 4. Consecrated bread is a piece of wax, paste, or even earth, over which several ceremonies have been performed with benedictions, &c. to be sent in an *Agnus Dei*, or relic-box, and presented for veneration. 5. Unleavened bread, *panis azymus*. The Jews eat no other bread during their passover; and exact search was made in every house, to see that no leavened bread was left. The usage was introduced in memory of their hasty departure from Egypt, when they had not leisure to bake leavened. 6. Shew-bread was that offered to God every Sabbath-day, being placed on the golden table in the holy of holies.

Horse-BREAD is made of wheat, oats, and beans; to which sometimes are added aniseed, gentian, liquorice, fænugreek, eggs, and ale; and sometimes rye and white wine are used.

For race-horses three sorts of bread are usually given with success, for the second, third, and fourth nights feeding: they are all made of beans and wheat worked with barm; the difference consisting chiefly in the proportion of the two former. In the first kind, three times the quantity of beans is used to one of wheat; in the second, equal quantities of both; in the third, three times the quantity of wheat to one of beans.

Sago BREAD. See SAGO.

Affize * of *BREAD*. The price and weight of bread is * See *Affize*, regulated by the magistrates according to the price of par. ult. wheat. We have divers tables of the weights of the loaves both of wheat, wheaten, and household bread, at every price of wheat. If bread want one ounce in 36, the baker formerly was to suffer the pillory: now, to forfeit 5s. for every ounce wanting; and for every defect less than an ounce, 2s. 6d; such bread being complained of and weighed before a magistrate within 24 hours after it is baked or exposed to sale within the bills of mortality, or within three days in any other place. It is to be observed, bread loses weight by keeping: in some experiments recited by Bartholine, the diminution was near one-fourth in six months. The same author assures us, that in Norway they make bread which keeps 30 or 40 years; and that they are there fonder of their old hard bread, than elsewhere of new or soft; since the older it is, the more agreeable it grows. For their great feasts, particular care is taken to have the oldest bread; so that, at the christening of a child, they have usually bread which had been baked perhaps at the christening of his grandfather. It is made of barley and oat-meal baked between two hollow stones.

Breads

Bread
||
Breast.

BREAD-ROOM, in a ship, that destined to hold the bread or biscuit.

The boards of the bread-room should be jointed and caulked, and even lined with tin-plates or mats. It is also proper to warm it well with charcoal for several days before the biscuit is put into it; since nothing is more injurious to the bread than moisture.

BREADTH, in geometry, one of the three dimensions of bodies, which multiplied into their length constitutes a surface.

BREAK, in a general sense, signifies to divide a thing into several parts with violence.

In the art of war, to *break ground*, is to open the trenches before a place.

Among sportsmen, to *break a horse* in trotting, is to make him light upon the hand in trotting, in order to make him fit for a gallop. To *break a horse* for hunting, is to supple him, to make him take the habit of running.

BREAKERS, a name given by sailors to those billows that break violently over rocks lying under the surface of the sea. They are distinguished both by their appearance and sound, as they cover that part of the sea with a perpetual foam, and produce a hoarse and terrible roaring, very different from what the waves usually have in a deeper bottom. When a ship is unhappily driven among breakers, it is hardly possible to save her, as every billow that heaves her upwards serves to dash her down with additional force when it breaks over the rocks or sands beneath it.

BREAKING, in a mercantile style, denotes the becoming bankrupt. See **BANKRUPT**.

BREAKING-Bulk, in the sea-language, is the same with unlading part of the cargo.

BREAKSPEAR (Nicholas). See **ADRIAN IV.**

BREAM, in ichthyology. See **CYPRINUS**.

To *BREAM*, to burn off the filth, such as grass, ooze, shells, or sea-weed, from a ship's bottom, that has gathered to it in a voyage, or by lying long in a harbour. This operation is performed by holding kindled furze, faggots, or such materials, to the bottom, so that the flame incorporating with the pitch, sulphur, &c. that had formerly covered it, immediately loosens and throws off whatever filth may have adhered to the planks. After this, the bottom is covered anew with a composition of sulphur, tallow, &c. which not only makes it smooth and slippery, so as to divide the fluid more readily, but also poisons and destroys those worms which eat through the planks in the course of a voyage. Breaming may be performed either when the ship lies a ground after the tide has ebbed from her, or by docking, or by careening.

BREAST, in anatomy, denotes the fore-parts of the thorax. See **ANATOMY**, n° 36, III.

Smiting the breast is one of the expressions of penitence. In the Romish church, the priest beats his breast in rehearsing the general confession at the beginning of the mass.

BREASTS, or *Mammæ*, in anatomy. See **ANATOMY**, p. 171. *Cass.* Lex. Med. n° 112.

The breasts are usually two; though we also meet with instances of *trimamie* or women with three breasts*, and even some with four, all yielding milk alike†.

BREAST-HOOKS, in ship-building, are thick pieces of

timber incurvated into the form of knees, and used to strengthen the fore-part of the ship, where they are placed at different heights directly across the stem, so as to unite it with the bows on each side. The breast-hooks are strongly connected to the stem and hawse-pieces by tree-nails, and by bolts driven from without through the planks and hawse-pieces, and the whole thickness of the breast-hooks, upon whose inside those bolts are forelocked or clinched upon rings. They are usually about one third thicker, and twice as long, as the knees of the decks they support.

BREAST-Plate, in antiquity, a piece of armour worn to defend the breast, originally believed to be made of hides, or hemp twisted into small cords, but afterwards made of brass, iron, or other metals, which were sometimes so exquisitely hardened, as to be proof against the greatest force.

BREAST-Plate, in Jewish antiquity, one part of the priestly vestments anciently worn by the high priests. It was a folded piece of the same rich embroidered stuff of which the *ephod* was made; and it was set with twelve precious stones, on each of which was engraven the name of the tribes. They were set in four rows, three in each row; and were divided from each other by the little golden squares or partitions in which they were set. The names of these stones, and that of the tribes engraven on them, as also their disposition on the breast-plate, are as follows:

<i>Sardine.</i> REUBEN.	<i>Emerald.</i> JUDAH.	<i>Ligure.</i> GAD.	<i>Beryl.</i> ZEBULUN.
<i>Topaz.</i> SIMEON.	<i>Sapphire.</i> DAN.	<i>Agat.</i> ASHER.	<i>Onyx.</i> JOSEPH.
<i>Carbuncle.</i> LEVI.	<i>Diamond.</i> NAPHTALI.	<i>Amethyst.</i> ISSACHAR.	<i>Jasper.</i> BENJAMIN.

This breast-plate was fastened at the four corners; those on the top to each shoulder by a golden hook or ring at the end of a wreathed chain; and those below, to the girdle of the *ephod*, by two strings or ribbons, which had likewise two rings and hooks.

This ornament was never to be severed from the priestly garment; and it was called the *memorial*, to put the high-priest in mind how dear those tribes ought to be to him, whose names he wore on his breast. It is also called the *breast plate of judgment*, because it had the divine oracle of *Urim and Thummim* annexed to it. See **URIM AND THUMMIM**.

BREAST-Plate, in the manege, the strap of leather that runs from one side of the saddle to the other, over the horse's breast, in order to keep the saddle right, and hinder it from sliding backwards.

BREAST-Work, in fortification, the same with **PARAPET**.

BREATH, the air inspired and expelled again in the action of respiration.

The ancients were very watchful over the last breath of dying persons, which the nearest relations, as the mother, father, brother, or the like, received in their mouths.

BREATHING, the same with **RESPIRATION**.

BRECHIN, a town of Scotland, in the county of Angus, situated in W. Long. 2. 18. N. Lat. 56. 40. It consists

Breast
||
Brechin.

* Barthol.

An. Med.

p. 171. *Cass.*

Lex. Med. n° 112.

p. 728.

† Cabrol. Ob-

serv. 7.

Blas. Com.

ad Velling.

p. 133.

Brechin. consists of one large handsome street, and two smaller; and is seated on the side of a small hill, washed by the river Southesk, over which there is a stone-bridge of two large arches. At the foot of the town is a long row of houses independent of it, built on ground held in feu from the family of Northesk. It is a royal borough, and, with four others, sends a member to parliament. In respect to trade, it has only a small share of the linen manufacture. It lies at no great distance from the harbour of Montrose; and the tide flows within two miles of the town; to which a canal might be made, which perhaps might create a trade, but would be of certain service in conveying down the corn of the country for exportation.

*Pennant's
Tour in Scot-
land.*

Brechin was a rich and ancient bishopric founded by David I. about the year 1150. At the Reformation, its revenues, in money and in kind, amounted to 700 l. a-year; but, after that event, were reduced to 150 l. chiefly by the alienation of lands and tythes by Alexander Campbell, the first Protestant bishop, to his chieftain the earl of Argyle.—The Culdees had a convent here. Their abbot Leod was witness to the grant made by king David to his new abbey of Dunfermline. In after times, they gave way to the Mathurines or Red Friars. The ruins of their house, according to Maitland, are still to be seen in the College Wynd.—Here was likewise an hospital called *Maison de Dieu*, founded in 1256, by William de Brechin, for the repose of the souls of the kings William and Alexander; of John earl of Chester, and of Huntingdon his brother; of Henry his father, and Juliana his mother. Albinus bishop of Brechin, in the reign of Alexander II. was witness to the grant. By the walls which are yet standing, behind the west end of the chief street, it appears to have been an elegant little building.

The cathedral is a Gothic pile, supported by 12 pillars; is in length 166 feet, in breadth 61: part is ruinous, and part serves as the parish-church. The west end of one of the ailes is entire: its door is Gothic, and the arch consists of many mouldings; the window of it neat tracery. The steeple is a handsome tower, 120 feet high; the four lower windows in form of long narrow openings; the belfry windows adorned with that species of opening called the *quatrefoil*: the top-battlemented, out of which rises a handsome spire.—At a small distance from the aile stands one of those singular round towers whose use has so long baffled the conjectures of antiquaries. These towers appear to have been peculiar to North-Britain and Ireland: in the last they are frequent; in the former, only two at this time exist. That at Brechin stood originally detached from other buildings. It is at present joined near the bottom by a low additional aile to the church, which takes in about a sixth of its circumference. From this aile there is an entrance into it of modern date, approachable by a few steps, for the use of the ringers; two handsome bells are placed in it, which are got at by means of six ladders placed on wooden semicircular floors, each resting on the circular abutments within side of the tower. The height from the ground to the roof is 80 feet; the inner diameter, within a few feet of the bottom, is 8 feet; the thickness of the wall at that part, 7 feet 2 inches; so that the whole diameter is 15 feet 2 inches; the circumference very near 48 feet; the inner diame-

ter at top is 8 feet 7 inches; the thickness of the walls 4 feet 6 inches; the circumference, 38 feet 8 inches: which proportion gives the building an inexpressible elegance: the top is roofed with an octagonal spire 23 feet high, which makes the whole 103. In this spire are four windows placed alternate on the sides, resting on the top of the tower; near the top of the tower are four others facing the four cardinal points: near the bottom are two arches, one within another, in relief; on the top of the utmost is a crucifixion: between the mouldings of the utmost and inner are two figures; one of the Virgin Mary; the other of St John, the cup, and lamb. On each corner of the bottom of this arch is a figure of certain beasts; one possibly the Caledonian bear; and the other, with a long snout, the boar. The stone-work within the inner arch has a small slit or peep-hole, but without the appearance of there having been a door within any modern period: yet there might have been one originally; for the filling up consists of larger stones than the rest of this curious rotund. The whole is built with most elegant masonry, which Mr Gough observed to be composed of 60 courses.—This tower hath often been observed to vibrate with a high wind.

The castle of Brechin was built on an eminence, a little south of the town; it underwent a long siege in the year 1303; was gallantly defended against the English under Edward III.; and, notwithstanding all the efforts of that potent prince, the brave governor Sir Thomas Maule, ancestor of the present earl of Panmure, held out this small fortress for 20 days, till he was slain by a stone cast from an engine on the 20th of August, when the place was instantly surrendered. The family of Panmure have now a noble house on the side of the old castle.—Brechin is also remarkable for a battle fought near it, in consequence of the rebellion raised in 1452, on account of the murder of the earl of Douglas in Stirling castle. The victory fell to the royalists under the earl of Huntly. The malecontents were headed by the earl of Crawford, who, retiring to his castle of Finhaven, in the frenzy of disgrace declared, that he would willingly pass seven years in hell, to obtain the glory that fell to the share of his antagonist.

BRECKNOCK, or **BRECON**, a town of Brecknockshire in Wales, and capital of the county. It is called by the Welch *Aber Hondey*, and is seated at the confluence of the rivers Hondey and Usk, over which there is a handsome stone bridge. It is an ancient place, containing three churches, one of which is collegiate, and is seated at the west end of the town. The houses are well built. Here was formerly a stately castle, and a strong wall, through which there were three gates, that are all demolished. It sends one member to parliament. It is well inhabited, which is in some measure owing to its being the town where the assizes are kept; and there is here a considerable woollen-manufactory. The markets are well supplied with cattle, corn, and provisions. W. Long. 3. 15. N. Lat 52. 0.

BRECKNOCKSHIRE, a county of Wales, bounded by Radnorshire, on the north; Cardiganshire and Caermarthenshire, on the west; Herefordshire and Monmouthshire, on the east; and by Glamorganshire and Monmouthshire, on the south. It is 35 miles in length, 30 in breadth, and about 100 in circumference. It is surrounded with hills, which renders the air in the

Brechin
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Brecknock-
shire.

Brecknock
shire,
Breda.

the valleys pretty temperate. The soil on the hills is very stony, but the streams descending from thence into the valleys render them fruitful both in corn and grass. The chief commodities here are corn, cattle, fish, and otter's fur, besides manufactures of cloth and stockings. The principal rivers are the Usk, the Wye, and the Yrvon. The chief towns are Brecknock, Bealt, and Hay.

Two miles to the east of Brecknock is a large lake, called *Brecknock Meer*, and by the Welch *Llyn Sawad-dan*; it is two miles in length, and nearly the same in breadth. It contains plenty of otters, tench, perch, and eels. The county sends one member to parliament. It is in the diocese of Landaff, and contains 61 parishes, and is divided into six hundreds.

BREDA, a town in Holland, the capital of Dutch Brabant. It is a large, populous, well built city, regularly fortified after the modern way, and is one of the strongest places on the Dutch frontiers. It is seated on the river Meek, in a marshy country, which may be overflowed and rendered inaccessible to an army. It is 4000 paces in circumference, and contains upwards of 2000 houses. The town is of a triangular figure, and the ramparts are all planted round with elms. At every angle there is a gate built with brick. The great church is a noble structure, remarkable for its fine spire, which is 362 feet high. The mausoleum of Angelbert II. count of Nassau, is a curious piece adorned with several statues and inscriptions suitable to the occasion. In 1577 the garrison delivered this city to the States-general; but it was retaken in 1581 by Cloude de Barlaimont, assisted by the baron de Fresin, who was prisoner therein. In 1590, prince Maurice took it again from the Spaniards.

In 1625 it was invested by Spinola; when it endured a siege too remarkable not to deserve a particular detail.

The citadel, which formed the residence of the princes of that family, was surrounded by a ditch of prodigious depth filled with water, and a strong wall defended by three great bastions; and the arsenal was celebrated for its extent, and the vast quantities of arms and military stores it contained. Spinola, perfectly acquainted with the strength of the place, thought he should expose his whole army to imminent destruction, should he attempt an assault before he had regularly carried on his approaches. He even resolved upon reducing the city by famine, as the method attended with least danger to his army; and accordingly began with drawing trenches round, for the space of four miles, erecting forts and redoubts at certain distances.

On the other hand, the garrison, consisting of seven thousand infantry, and several troops of horse, composed of English, French, and Dutch soldiers, took the most vigorous measures for their own defence. The English were under the command of colonel Morgan, who had frequently distinguished his valour in the service of the states: the French were directed by colonel de Hauterive; and the Dutch troops were subject to the immediate orders of colonel Lohre, though the whole received their instructions from Justin de Nassau, the governor. The first advantage was gained by Baglioni, who seized a large convoy of provisions and stores coming up the river, converting the boats into a bridge. This loss dispirited the besieged, and reduced them to

a stated allowance of bread; and what added to their misfortunes, though they were ignorant of it, was the death of Prince Maurice, from whom they were in hopes of receiving relief.

Meanwhile Spinola prosecuted the siege with the utmost diligence and vigour. On his pushing his trenches near the bastions, the besieged began a terrible fire to retard his approaches, and kept it up with such vehemence and obstinacy, that Spinola was in hopes they must soon surrender for want of ammunition. But here he formed a false judgment of the prudence of Justin de Nassau, who finding he could not accomplish his purpose by his firing, resolved to try the effect of water. With this view, he stopped up the course of the river Mark; and having formed a large basin of water, opened the sluices, swept away men, horses, and houses, in an inundation, and overflowed the whole country. The chief force of the torrent fell upon Spinola's quarters, and he exerted his utmost ability to remove the consequences. He dug large pits, and cut out ditches and canals to receive the water; but these being filled, and the whole ground covered over, so as to appear one uniform mass of water, served only to entrap his cavalry. The inundation was augmented by the rains which happened to fall; a mortality among the soldiers and horses ensued; and of his whole army, Spinola had scarce twelve thousand men fit for service by the month of December. With these inconsiderable remains, lines of vast extent were to be defended, the works were to be advanced, the sallies from the garrison repulsed, and provisions to be conveyed into the camp, while Spinola, the soul of action, was confined to a sick-bed.

In the garrison, an epidemical disease and scarcity likewise prevailed; but the excellent regulations made, and strictly observed, enabled the town to hold out three or four months beyond the time expected. The magistrates bought the corn for the bakers; obliging them to sell the bread to the inhabitants and garrison at a price affixed, and returning the overplus of their pay to the soldiers. A variety of other prudent regulations were established by the magistrates and governor, such as we do not find equalled by any instances recorded in history upon a similar occasion, and all evincing the steadiness, sagacity, courage, and ability, of Justin de Nassau. A kind of rivalry appeared between him and Spinola, which should best fulfil their several duties. The Spanish general caused himself to be carried about the works in a litter; he inspected and directed every thing; and displayed the activity of full health at the time his life was in imminent danger from an acute malady. He ordered several breaches in the lines to be repaired. These the Hollanders had made by sap, with a view of introducing succours to the besieged. He drove piles into all the ditches and canals through which their boats could pass. He made drains, to clear off the waters of the river Marek; and succeeded in a great measure by dint of perseverance, vigilance, and conduct. He was now reinforced with a body of eight thousand foot, and one thousand five hundred horse; many of the sick were perfectly recovered by his extreme care; and his army was again become formidable, amounting to twenty-five thousand infantry, and eight thousand cavalry. Nor was Prince Henry idle, who now succeeded to the

Breda.

titles

Breda. titles and dominions of his brother Maurice, and was elected governor of Holland, Zealand, Guelderland, Utrecht, and Overijssel. He pressed France for assistance, and was joined by a body of cavalry under the conduct of the count de Roussi and the marquis de Rambures. With this reinforcement, and a body of German infantry, he attacked the enemy's lines, and after an obstinate conflict was repulsed. He advanced a second time; but Spinola, who entertained a high opinion of his valour and conduct, did not choose to wait for him in his lines; he marched out with the greater part of his army, seized upon a convenient post, and obliged the prince a second time to retire towards Boisleduc. Henry, finding no prospect of being able to relieve the garrison, sent a permission to the governor to surrender on the best conditions he could obtain. This plan, which was signed with no name, fell into the hands of the besiegers, and Spinola sent it open, by a trumpet, to Justin de Nassau, offering him an honourable capitulation; but that intrepid governor, suspecting the letter was forged, because it was anonymous, replied civilly, that a permission was not an order to surrender; and that he should better follow the prince of Orange's intention, and show his respect for Spinola, by continuing to defend the city to the last extremity.

By this time the garrison was diminished by disease, fatigue, want, and hardship, to half the original number; but Justin put on such a countenance, as concealed his situation from Spinola. He frequently sallied out upon Baglioni's quarters, where the Italians were perishing with cold and hunger, the whole subsistence of the besiegers depending on the contributions raised in the neighbouring territories. This inconvenience produced a mutiny in the camp, that could not be appeased without applying violent remedies, and executing within sight of the whole army the chief ringleaders. One of the mutineers blew up Spinola's chief magazine, valued at two hundred thousand livres. Urged more by necessity than compassion for the besieged, Spinola sent a message to the governor, exhorting him not to force him to extremities, which might be attended with fatal consequences to a brave garrison; but Justin, with equal art and dissimulation, answered, that Spinola was certainly ill served by his spies, as he appeared wholly unacquainted with the state of affairs in Breda, which was fully provided for a siege of several months, and defended by soldiers who preferred death to the necessity of surrendering. At that time the besieged were not informed of the death of the prince of Orange. They flattered themselves with the hopes of speedy succour, and were entirely ignorant of prince Henry's late disappointment. When they wrote to the army an account of their miserable condition, Henry returned an answer, written with his own hand, and signed with his name, apprising them of the death of Maurice, the unsuccessful attempts made to raise the siege and throw in succours, the great inferiority of his troops in point of numbers, and the death of king James, whereby he was disappointed of a strong reinforcement; concluding, that he left the city entirely to the discretion of the governor and other principal officers. Justin was thunderstruck with the contents of this letter. He had hitherto concealed the total want of provision and ammunition from the

enemy, and his own garrison, except a few officers and other persons in whom he reposed confidence. The colonels Hauterive and Morgan would listen to no propositions, saying, that the honour of their several countries were concerned, and that they were responsible for the conduct of the English and French forces. They therefore required an express order from the prince of Orange to surrender, notwithstanding they pined under the united pressure of fatigue, scarcity, and disease. Justin acquainted the prince with their resolution, and he sent back an order to surrender, threatening with capital punishment whoever should disobey; but he requested that the garrison would first acquaint him by a certain number of fires, lighted up in different parts of the city, how many days they should be able to hold out. Upon receipt of this order, eleven fires were kindled; but as the prince had sent a duplicate of the order by another messenger, and this fell into the hands of the enemy, Spinola was now acquainted with the desperate circumstances of the besieged. By this acquisition he likewise discovered the mystery of the eleven fires: a council of war was assembled to deliberate whether they should stay the eleven days, and then oblige the garrison to surrender at discretion, or immediately offer conditions worthy of so brave a garrison. The Spanish officers were of the former opinion; the count de Berg and Spinola supported the latter. At last the marquis, determined to pursue the dictates of his noble generosity, sent such terms as could not be refused. The count de Berg conducted the negotiation. Two separate capitulations were drawn up, one for the garrison and the other for the city, and both the most honourable and advantageous that could be devised. They were accepted, and the garrison marched out on the 6th of June, after having sustained a siege for ten months, whereby they were diminished two-thirds; nor was the loss inferior on the part of the inhabitants. Spinola drew up his army to salute them, and, surrounded by his field officers, paid particular compliments to the governor, the colonels Morgan, Hauterive, and Lohre. He distributed money among the soldiers, ordered the sick and wounded to be treated with the utmost tenderness, conveyed the rest in the manner most commodious for them to Gertruydenburgh, and displayed all the sentiments of a hero in the regard paid to the valour and merit of his enemies.

Breda was retaken by the prince of Orange, for the United Provinces, in 1637. There was a congress held there, and peace concluded, in 1667, between the Dutch and the English. E. Long. 4. 45. N. Lat. 51. 35.

BREDA (John Van), painter of history, landscape, and conversations, was born at Antwerp in 1683, the son of Alexander Van Breda, an artist who was much esteemed for landscapes, views of particular scenes in Italy, fairs, and markets, with a variety of animals and figures. He was instructed by his father; and having the advantage of a good example and a good director, added to his own great application, he continued his studies with his father till he was 18 years of age. Among the variety of capital paintings which were at that time in the possession of John de Wit at Antwerp, Breda fixed upon those of Velvet Brueghel, which he copied with extraordinary success; and he was also employed for

nine.

Breda
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Breeches.

nine years in copying the pictures of several other great masters; which he performed with such incredible exactness as scarcely to leave it in the power of any judicious person to distinguish the originals from the copies. Having at length established his reputation in Holland, he went to London with Ryfbrack the sculptor, and there gradually rose into such esteem, that he was visited by persons of the highest rank, and particularly patronized by the unfortunate earl of Derwentwater, who was beheaded for rebellion in 1715. He found so much encouragement in London, that he was employed by the court and the nobility, and could scarce execute the large demands for his performances. After a residence of some years in England, he returned to Antwerp loaded with riches, the honourable testimonies of English liberality, as well as of his own merit; and in the year 1746, when Louis XV. arrived in that city, he so far honoured this master as to purchase four of his pictures. One represented Christ at the sea of Tiberias; another, Christ performing miracles; and the other two were landscapes, with a number of figures, so exquisitely drawn and finished that it would be difficult to distinguish them from those of Velvel Brueghel. He certainly approached nearer to those great masters whose manner he imitated, namely, Brueghel and Wouvermans, than any other artist of his time. His landscapes are in the style and taste of the former, and his conversations, historical figures, fairs, skirmishes, or battles, are in the manner of the latter. His colouring is good; his touch neat; his skies and distances natural and beautiful; and his taste of design agreeable. He had as much fire in his composition, and perhaps more genius, than Brueghel, in those subjects which he painted in the style of that master; his figures are generally well placed, his grounds skilfully broken; every small figure hath its particular character, and occupies its proper place; and, in short, he is a painter of such a rank, that the value and estimation of his works must always increase. He died in 1750.

Pilkington's
Dict.

BREECH of a great gun, or cannon, the end next the touch-hole.

BREECHES, a garment worn by males, reaching from the girdle to the knees, and serving to cover the hips, thighs, &c.

The ancient Romans had nothing in their dress answering to our breeches and stockings; instead of which, under their lower tunics and waistcoats they sometimes bound their thighs and legs round with silken scarves or fasciæ, called *tibialia* and *femoralia*. Breeches appear to be a habit peculiar to the barbarous nations, especially those inhabiting the colder countries of the north; whence Tacitus calls them *barbarum tegmen*. We find mention made of them among the ancient Getæ, Sarmatæ, Gauls, Germans, and Britons; they also obtained among the Medes and Persians, as being a people of Scythian origin; they also afterwards got footing in Italy, some pretend as early as the time of Augustus; but without much foundation, that emperor's breeches, mentioned by Suetonius, being apparently only swaths tied over his thighs. However this be, breeches were at last received into Italy, and grew so highly into fashion, that it was thought necessary, under Honorius and Arcadius, to restrain them by

law, and expel the *bracarii* or breeches-makers out of the city; it being thought unworthy of a nation that commanded the world, to wear the apparel of barbarians.

BREECHINGS, in the sea-language, the ropes with which the great guns are lashed or fastened to the ship's side. They are thus called, because made to pass round the breech of the gun.

BREEDING, in a general sense, the producing, nourishing, and educating, all manner of young animals.

BREEDING, in a moral sense, denotes a person's deportment or behaviour in the external offices and decourms of social life. In this sense we say *well-bred*, *ill-bred*, *a man of breeding*, &c. Good-breeding is hard to define; none can understand the speculation but those who have the practice. Good-breeding amounts to much the same with what is otherwise called *politeness*, among the ancient Romans *urbanity*. Good-breeding is near to virtue, and will of itself lead a man a great part of the way towards the same. It teaches him to rejoice in acts of civility, to seek out objects of compassion, and to be pleased with every occasion of doing them good offices. Lord Shaftesbury compares the well-bred man with the real philosopher: both characters aim at what is excellent, aspire to a just taste, and carry in view the model of what is beautiful and becoming. The conduct and manners of the one are formed according to the most perfect ease, and good entertainment of company; of the other, according to the strictest interest of mankind; the one according to his rank and quality in his private station; the other according to his rank and dignity in nature. Horace seems to have united both characters,

Quid verum atque decens curo et rogo, et omnis in hoc sum.

See the article *Good-MANNERS*.

BREEDING of Horses. See *EQUUS*.

BREEDING of Fish. The necessary qualities of a pond, to make it serve well for breeding fish, are very different from those which are to make it serve for the feeding of them, insomuch that some particular ponds serve only for one of these purposes, and others for the other; and scarce ever the same pond is found to answer for them both. In general, it is much more rare to find a good breeding pond than a good feeding one. The best indications for a good breeding pond are these; that there be a good quantity of rushes and grass about its sides, with gravelly shoals, such as horse-ponds usually have: when a pond has this property, and takes to the breeding of fish, it is amazing what a progress will be made in a little time. The spawn of fish is prodigious in quantity; and where it succeeds, one is able to produce many millions: thus, in one of these breeding ponds, two or three melters, and as many spawners, will, in a very little time, stock the whole country. When these ponds are not meant entirely for breeding, but the owner would have the fish to grow to some size in them, the method is to thin the numbers, because they would otherwise starve one another, and to put in other fish that will prey upon the young, and thin them in the quickest manner. Eels and perch are the most useful on this account; because they prey not only upon the spawn itself, but upon the young fry from the first hatching to the time they are of considerable size.

Some

Breenberg Some fish are observed to breed indifferently in all kinds of waters, and that in considerable plenty; of this nature are the roach, pike, and perch.

BREENBERG (Bartholomew), an excellent painter, was born in 1620. He is best known by the name of *Bartolomeo*, an appellation bestowed upon him, for distinction sake, by the society of Flemish painters at Rome called *Bentvogels*. He was born at Utrecht; but in the early part of his life went to Rome. His studies in the art of painting were attended with such success, that his pictures were held in the highest estimation. He greatly excelled in landscapes, and these he enriched with historical subjects. The figures and animals which he introduced were very spirited, and drawn in a masterly manner; especially when they were not larger than the size in which he usually painted them. He died in 1660, aged 40 years. He also etched from his own designs a set of 24 *Views and Landscapes, ornamented with Ruins*.

BREEZE, a shifting wind that blows from sea or land for some certain hours in the day or night; common in Africa and some parts of the East and West Indies.

Breezes differ from *etesia* or trade-winds, as the former are diurnal, or have their periods each day; and the latter are anniversary, and blow at a distance from land. The sea-breezes rule by day, and the land-breezes by night; so that, dividing their empire, they remain constant as the seasons of the year, or course of the sun, on which they seem to depend: not but that they appear sooner or later, stronger or weaker, in some places than in others; and vary the alternative according to the several latitudes, situations, and soils, &c. of the countries where they are found. See the article **WIND**.

BREEZE-Fly. See **TABANUS**.

BREGENTZ, or **BERGENTZ**, a town of Tyrol in Germany, situated at the east end of the lake of Constance, in E. Long. 9. 40. N. Lat. 47. 36.

BREGMA, in anatomy, the same with *sinciput*. See **ANATOMY**, n° 11, 13.

BREHAR, one of the Scilly islands, lying almost directly west of the land's end in Cornwall, about the distance of 30 miles. It lies between the isles of Micarlo, Guel, Trescaw, and Samson. It is the roughest and most mountainous of them all, and not many years since, there were only two families in it, but now there are 13. There are a few poor houses, called the *town of Brehar*; and there are several **BARROWS** edged with stone, in which they buried considerable persons in ancient times; besides many monuments of the **DRUIDS**. Some are of opinion, that this with the rest made but one island, which is the reason why so many antiquities are now found in most of them.

BREHONS, the provincial judges among the ancient Irish, by whom justice was administered, and controversies decided. These sages were a distinct tribe or family, to whom competent lands were allowed in inheritance. In criminal cases the brehon had the eleventh part of all the fines; which could not but be considerable at a time when murders, rapes, robberies, and the like offences, were only subject to pecuniary commutations.

BREHON-LAWS, or *Leges Brebonicae*, denote the general maxims or rules of law observed by the brehons, and having the force of laws throughout all the provinces of Ireland. Several fragments of the *leges*

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brebonicae are still extant in public and private libraries. The most complete collection is that belonging to the duke of Chandos; containing 22½ sheets close written, full of abbreviated words, and not very legible. By the statute of Kilkenny, made under Edward III. it is enacted that no English subject shall submit to a trial by the *brehon* law, on the penalty of high treason. Notwithstanding which, many were still under a necessity of being concluded by the Irish laws and customs, till the whole kingdom was settled on an English bottom by King James I.

BREMEGARTON, a handsome and pretty considerable town of Swisserland, in the territory of Fyen-Aempter, between the cantons of Zurich and Bern. The inhabitants deal chiefly in paper; and their religion is the Roman-catholic. It is divided into the upper and larger towns, and is very advantageously seated on the river Rufs. E. Long. 8. 25. N. Lat. 47. 20.

BREMEN, a large, populous, and very strong town of Germany, capital of a duchy of the same name, with an archbishop's see, secularized in favour of the Swedes, but now belongs to the elector of Hanover. The river Weser runs through the middle, and divides it into the old and new town. In September 1739, while the inhabitants were asleep, the magazine of powder was set on fire by lightning; and all the houses were shook, as if there had been a violent earthquake, which threw them into a terrible consternation. This town is divided into four quarters, each of which has a Burgomaster; and in the middle there is a large market-place, with the statue of Rolando. Bremen drives a very large trade for iron, flax, hemp, and linen, with France, England, Spain, and Portugal, and in return takes back other provisions, with which it supplies Westphalia and the countries about Hanover. It also gets a great deal by its fisheries; the trade for blubber with the south of Germany is very considerable. E. Long. 8. 45. N. Lat. 53. 40.

BREMEN, a duchy of Germany, in the province of Lower Saxony, lying between the rivers Weser and the Elbe; of which the former separates it from the duchy of Oldenburgh, and the other from that of Holstein. The air is cold; but the country is fertile, and well peopled. It formerly belonged to the Swedes, but was afterwards sold to the king of Great Britain, as elector of Hanover, in 1716. In the winter it is subject to inundations. In 1617, on Christmas-day, several thousand cattle were drowned, besides several hundred of men; and the country was so covered with water, that it has cost immense sums to repair the dykes. Bremen is the capital town.

BREMEN-VEERD, a town of Germany, in the circle of lower Saxony, and duchy of Bremen. It is an open town, seated on the river Oost, and was formerly the place of residence of the archbishop. E. Long. 8. 35. N. Lat. 53. 58.

BRENNAGE, **BRENNAGIUM**, in middle-age writers, a kind of tribute paid in lieu of bran, or bran itself, which the tenants were obliged to furnish for the support of the lord's hounds. The word is also written *brennage*, *brennagium*, and *brenaige*, *bernagium*, *brenaticum*, and *brennaticum*.

BRENNUS, a celebrated captain among the Gauls, who, about 388 years before the Christian æra, entered

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Italy

**Bremegar-
ton
Brennus.**

Brent
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Bresciano

Italy with a powerful army; made great conquests there; defeated the Romans; and sacked Rome. The capital alone was defended; and Camillus coming to its relief, drove the Gauls not only out of Rome, but out of all Italy. See (*History of*) ROME.

BRENT, a town of Devonshire, with a market on Saturdays, and two fairs, on May 13th and October 10th, for horned cattle. It is but a small place, and lies on the road from Exeter to Plymouth, being 26th miles south-west from the former, and 198 west-by-south of London. W. Long. 5. 7. N. Lat. 50. 30.

BRENT-Goose, a species of goose with a black neck, and a white collar round; usually confounded with the barnacle, tho' in reality a distinct species. See ANAS.

BRENTFORD, a town of Middlesex, in the great London road to the west. It is divided into old and new Brentford, in which last are the church and market-house, and where the county elections are held. It is a long place, well stocked with public houses, and is seated on the river Thames, in W. Long. 0. 10. N. Lat. 51. 26.

BRENTWOOD or BURNTWOOD, a town of Essex in England; it stands on a rising ground in the road from London to Colchester, and has several good inns. E. Long. 0. 25. N. Lat. 51. 38.

BREREWOOD (Edward), a very learned English mathematician and antiquary, was the son of Robert Brerewood a tradesman, who was thrice mayor of Chester; and born in that city in the year 1565. He was educated in grammar learning at the free school in Chester; and afterwards admitted, in 1581, of Brazen-nose-college in Oxford. In the year 1596, he became the first professor of astronomy in Gresham-college in London; where he led the same private and retired course of life that he had before done in Oxford. He died there of a fever, upon the 4th of November 1613, much lamented. He was a great searcher into antiquity and curious knowledge; but is remarkable for having never published any thing during his lifetime. After his death came out the following works. 1. *De ponderibus et pretiis veterum nummorum*. 2. Inquiries touching the diversities of languages and religion through the chief parts of the world. 3. *Elementa logica in gratiam studiosae juventutis in Acad. Oxon.* 4. *Tractatus quidam logici*. 5. 6. Two treatises on the Sabbath. 7. *Tractatus duo, quorum primus est de meteoris, secundus de oculis*. 8. *Commentarii in ethica Aristotelis*. Mr Wood tells us, that the original manuscript of this, written with his own hand, is in the smallest and neatest characters that his eyes ever beheld; and that it was finished by him on the 27th of October 1586. 9. Patriarchal government of the ancient church.

BRESCIA, a strong and handsome town of Italy, with a bishop's see and a good citadel. It is the capital of Bresciano in the territory of Venice, and is seated in an agreeable plain on the river Garza, in E. Long. 10. 5. N. Lat. 45. 31.

BRESCIANO, a province of Italy in the territory of Venice; bounded on the north, by the Grisons and the bishopric of Trent; on the east, by the lake Garda, the Veronese, and the duchy of Mantua; on the south, by the duchy of Mantua and the Cremonese; and on the west, by the Cremasco, the Burgomasco, and the Valtelina. It is watered by several small rivers, which

render it very fertile; and is full of towns and villages, of which Brescia is the capital.

BRESELLO, a small town in Italy of the duchy of Modena, seated on the river Po, in E. Long. 10. 25. N. Lat. 44. 55.

BRESCICATE, in commerce, a kind of bays, of which there is some trade carried on with the negroes, between the river Gambia and Sierra Leona. The best sorts for that purpose are the blue and the red.

BRESLAU, a small duchy of lower Silesia, in Germany, lying between those of Wolaw, Olse, Brieg, Schwednitz, and Lignitz. It is every where level and flat; is an excellent corn country, yielding also good pasture; abounding also with herds of cattle and flocks of sheep; but destitute of wood, except in one district or circle; and the roads in general are very bad. It is an immediate principality, that is, one of which both the property and jurisdiction belong to the king, forming a part of one of the three bailiwicks into which all the immediate principalities are divided.

BRESLAU, the chief town of the duchy of that name, and of all Silesia, is situated at the conflux of the Oder and Ohlau, in E. Long. 17. 5. N. Lat. 51. 4. Including the suburbs, it is of great extent; having many large regular squares, broad streets, stately public and private edifices; but the fortifications are of no great importance. Here are in particular a great many churches and convents belonging to the catholics; of the former are several also belonging to the Lutherans, one to the Calvinists, and another to the Greeks. The Jews have likewise two synagogues, the bishop a stately palace, and the Lutherans two gymnasiums. The Popish university is a noble structure, nor is the exchange destitute of magnificence. This city is the seat of all the high colleges; and the third in rank, next to Berlin and Konigsberg, in all the Prussian dominions. The magistracy of it is Lutheran, and its trade and manufactures are very considerable. Several of the monasteries and nunneries are very magnificent; and there are also some good public libraries in it, with two armouries, a college of physicians, and a mint. Breslau is very populous, and much frequented by Hungarian, Bohemian, Polish, and other merchants, having several yearly fairs. The city was taken by the king of Prussia in 1741, and retaken by the Austrians in 1757; but the king of Prussia took it back again the same year, and gained a signal victory over the Austrians at Leuthen, a village not far from the capital.

BRESSE, a province of France, bounded on the north by Burgundy and the Franche Comte; on the east, by Savoy; on the south, by Viennois; on the west, by the principality of Dombes and the Somme. It is 40 miles from north to south, and 23 from east to west. It is fertile in corn and hemp, has fine pastures, and several lakes with plenty of fish. It is divided into the higher and lower; the first is on the side of Bourges, and the second towards St Trivier and the river Sonne. The French got possession of it in 1601. The principal places are Bourgen, Bresse, Montluel, Pont de Vaux, and Coligny.

BRESSICI, in geography. See BRESTE.

BREST, a maritime town of France, in lower Brittany, seated on the declivity of a hill on the side of its port, which is the largest in the kingdom, and will hold

Bresello
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Brest.

Brest 500 ships at a time. There is an arsenal with stores, which was placed there on account of its nearness to the woods, mines of iron, and other things proper for the building of ships. It was entirely consumed by fire in 1744, which was an irreparable loss to France. The entrance into the port is guarded by a strong castle seated on a rock, which cannot be attempted on the sea side, because it is craggy, and is defended on the land side by a large ditch and other fortifications. The streets of Brest are very narrow, ill contrived, few in number, and have all a descent. A great quay surrounds this side of the port, which is above a mile in length, and 200 paces broad; and there are magazines on the quay full of all foreign merchandizes. On the other side of the port the fine church of Notre Dame is situated; and in a suburb, which is as big as half the city, there is a strong tower opposite to the castle, at the entrance of the port; there is also a great quay on this side, bordered with large magazines, partly within the rock, which has been cut away to enlarge the place. These are extended almost as far as the bottom of the harbour, where there are two docks very commodious for the building of large ships: the shops and houses of the workmen are all around them: the ropewalks are separated from the city by one of these docks. The entrance into the harbour is called the *gullet*, and is a passage extremely difficult on account of the sunk rocks on both sides of the shore; but there are experienced pilots who carry ships in very safely. The English attempted to take possession of this harbour in 1694, but were disappointed. W. Long. 4. 26. N. Lat. 48. 23.

BREST, or *Brest*, in architecture, a term sometimes used for the member of a column, more usually called *torus*. See **TORUS**.

BREST-Summers, in timber buildings, are pieces in the outward thereof, into which the girders are framed: this, in the ground-floor, is called a *cell*; and, in the garret-floor, a *beam*.—As to their size, it is the same with that of girders. See **GIRDERS**.

BRESTE, the palatinate of, is one of the provinces of Cujava, in Poland. It lies between the palatinates of Ploesko, Rava, and Lencici Wiadislav. It is divided into four chatelannies, and Breste is the capital of the whole.

BRESTE, or *Bressici*, the capital of the palatinate of Bressici, and of Polesia, in Poland, seated on the river Bog, 80 miles east of Warsaw, and subject to Poland. It is a fortified town, and has a castle built upon a rock. Here is a famous synagogue, resorted to by the Jews from all the countries in Europe. E. Long. 24. O. N. Lat. 41. 35.

BRET, a name the people on the coasts of Lincolnshire give to the common turbot, a fish extremely plentiful with them, and taken in vast abundance. The way of catching them is in a net trailed on the ground by two horses; the one going up to the middle of his body in water, the other on shore.

BRETESSE, in heraldry, denotes a line embattled on both sides.

BRETHREN AND SISTERS OF THE FREE SPIRIT, in Ecclesiastical History, an appellation assumed by a new sect which sprung up towards the close of the thirteenth century, and gained many adherents in Italy, France, and Germany. They took their denomina-

tion from the words of St Paul, Rom. chap. viii. ver. 2, 14. and maintained, that the true children of God were invested with the privilege of a full and perfect freedom from the jurisdiction of the law. They were enthusiasts to a degree of distraction, both in their principles and practice. They resembled the *Beghards*, by which name they were sometimes called, in their aspect, apparel, and manner of living. Some of their professed principles resembled those of the Pantheists; for they held, that all things flowed by emanation from God; that rational souls were portions of the Deity, and that the universe was God; and that, by the power of contemplation, they were united to the Deity, and acquired hereby a glorious and sublime liberty, both from the sinful lusts and the common instincts of nature: and hence they conclude, that the person, who was thus absorbed in the abyss of the Deity, became a part of the Godhead, and was the son of God, in the same sense and manner that Christ was, and that he was freed from the obligation of all laws human and divine. They treated with contempt all Christian ordinances, and all external acts of religion, as unsuitable to the state of perfection at which they were arrived. Some of them were honest but deluded enthusiasts; and they endured the torments inflicted upon them by the inquisitors with astonishing calmness and triumph. Others proceeded to the most extravagant licentiousness of conduct. They held their secret assemblies stark naked, and lay in the same beds with their spiritual sisters, and indiscriminately with other women, without the least scruple or hesitation: modesty and decency being, according to their creed, marks of inward corruption. And some of them proceeded still farther, and maintained, that the *divine man*, or believer, could not sin, let his conduct be ever so horrible or atrocious. Many edicts were published against them; but notwithstanding the severities they suffered, they continued till about the middle of the fifteenth century. They were called by several other names, such as *Schwestriones*, *Picards*, *Adamites*, and *Turlupins*.

BRETHREN and Clerks of the Common Life, a denomination assumed by a religious fraternity towards the latter end of the fifteenth century. They lived under the rule of St Augustin, and were eminently useful in promoting the cause of religion and learning. Their society was first formed, in the preceding century, by Gerard de Groote, a native of Deventer; but did not flourish till about the period above mentioned, when it obtained the approbation of the council of Constance, and became very respectable in Holland, the Lower Germany, and the adjacent provinces. It was divided into two classes; the *lettered brethren* or *clerks*, and the *illiterate*: they lived in separate habitations, but maintained the closest fraternal union. The former applied to the study of polite literature, and the education of youth; whilst the latter were employed in manual labour, and the mechanic arts. They were frequently called *Beghards* and *Lollards*, by way of reproach.

White BRETHREN, *fratres albat*, were the followers of a leader about the beginning of the fifteenth century, who was arrayed in a white garment; and as they were also clothed in white linen, they were distinguished by this title. Their leader was a priest from the

Breton.

Alps, who carried about a cross, like a standard, and whose apparent sanctity and devotion drew together a number of followers. This deluded enthusiast practised many acts of mortification and penance, endeavoured to persuade the European nations to renew the holy war, and pretended that he was favoured with divine visions. Boniface IX. ordered him to be apprehended and committed to the flames, upon which his followers dispersed.

BRETON, or CAPE-BRITAIN, an island near the eastern continent of North America, lying between 45 and 47 degrees of north latitude. It is separated from Nova Scotia by a narrow strait called *Canso*, and is about 100 miles in length, and 50 in breadth. It is surrounded with little sharp-pointed rocks, separated from each other by the waves, above which some of their tops are visible. All its harbours are open to the east, turning towards the south. On the other parts of the coast there are but a few anchoring places for small vessels, in creeks, or between islets. Except in the hilly parts, the surface of the country has but little solidity, being every where covered with a light moss, and with water. The dampness of the soil is exhaled in fogs, without rendering the air unwholesome. In other respects, the climate is very cold; owing either to the prodigious quantity of lakes, which cover above half the island, and remain frozen a long time; or to the number of forests, that totally intercept the rays of the sun; the effect of which is besides decreased by perpetual clouds.

Though some fishermen had long resorted to this island every summer, not more than 20 or 30 had ever fixed there. The French, who took possession of it in August 1713, were properly the first inhabitants. They changed its name into that of *Isle Royale*, and fixed upon Fort Dauphin for their principal settlement. This harbour was two leagues in circumference. The ships came to the very shore, and were sheltered from winds. Forests affording oak sufficient to fortify and build a large city, were near at hand; the ground appeared less barren than in other parts, and the fishery was more plentiful. This harbour might have been rendered impregnable at a trifling expence; but the difficulty of approaching it (a circumstance that had at first made a stronger impression than the advantages resulting from it) occasioned it to be abandoned, after great labour had been bestowed upon the undertaking. They then turned their views to Louisbourg, the access to which was easier; and convenience was thus preferred to security: the fortification of Louisbourg, however, was not begun till 1720.

In the year 1714, some fishermen, who till then had lived in Newfoundland, settled in this island. It was expected that their number would soon have been increased by the Acadians, who were at liberty, from the treaties that had been granted them, to remove with all their effects, and even to dispose of their estates; but these hopes were disappointed. The Acadians chose rather to retain their possessions under the dominion of Britain, than to give them up for any precarious advantage they might derive from their attachment to France. Their place was supplied by some distressed adventurers from Europe, who came over from time to time to Cape Breton, and the number of inhabitants gradually increased to 4000. They were settled at

Breton.

Louisbourg, Fort Dauphin, Port Toulouse, Nerucka, and on all the coasts where they found a proper beach for drying the cod. The inhabitants never applied themselves to agriculture, the soil being unfit for it. They often sowed corn, but it seldom came to maturity; and when it did thrive so much as to be worth reaping, it had degenerated so considerably, that it was not fit for seed for the next harvest. They have only continued to plant a few pot-herbs that are tolerably well tasted, but must be renewed every year from abroad. The poorness and scarcity of pastures has likewise prevented the increase of cattle. In a word, the soil of Cape Breton seemed calculated to invite none but fishermen and soldiers.

Though the island was entirely covered with forests before it was inhabited, its wood has scarce ever been an object of trade. A great quantity, however, of soft wood was found there fit for firing, and some that might be used for timber: but the oak has always been scarce, and the fir never yielded much resin. The peltry trade was a very inconsiderable object. It consisted only in the skins of a few lynxes, elks, musk-rats, wild cats, bears, otters, and foxes both of a red and silver-grey colour. Some of these were procured from a colony of Mickmac Indians who had settled on the island with the French, and never could raise more than 60 men able to bear arms. The rest came from St John's, or the neighbouring continent. Greater advantages might possibly have been derived from the coal-mines which abound in the island. They lie in a horizontal direction: and being no more than six or eight feet below the surface, may be worked without digging deep, or draining off the waters. Notwithstanding the prodigious demand for this coal from New England, from the year 1745 to 1749, these mines would probably have been forsaken, had not the ships which were sent out to the French islands wanted ballast. In one of these mines a fire has been kindled, which could never yet be extinguished.

The people of Cape Breton did not send all their fish to Europe. They sent part of it to the French southern islands, on board 20 or 25 ships from 70 to 140 tons burden. Besides the cod, which made at least half their cargo, they exported to the other colonies timber, planks, thin oak-boards, salted salmon and mackerel, train-oil, and sea-coal. All these were paid for in sugar and coffee, but chiefly in rum and molasses. The island could not consume all these commodities. Canada took off but a small part of the overplus; it was chiefly bought by the people of New England, who gave in exchange fruits, vegetables, wood, brick, and cattle. This trade of exchange was allowed; but a smuggling trade was added to it, carried on in flour, and salt fish.

This island, the key of Canada, was attacked by the English in 1745; and the event is of so singular a nature, that it deserves a particular detail. The plan of this first invasion was laid at Boston, and New England bore the expence of it. A merchant named *Pepperel*, who had excited, encouraged, and directed the enterprise, was intrusted with the command of an army of 6000 men, which had been levied for this expedition.

Though these forces, convoyed by a squadron from Jamaica, brought the first news to Cape Breton of the danger that threatened it; though the advantage of a surprise

Breton. surprise would have secured the landing without opposition; though they had but 600 regular troops to encounter, and 800 inhabitants hastily armed; the success of the undertaking was still precarious. What great exploits, indeed, could be expected from a militia suddenly assembled, who had never seen a siege or faced an enemy, and were to act under the direction of sea-officers only. These unexperienced troops stood in need of the assistance of some fortunate incident, which they were indeed favoured with in a singular manner.

The construction and repairs of the fortifications had always been left to the care of the garrison of Louisbourg. The soldiers were eager of being employed in these works, which they considered as conducive to their safety, and as the means of procuring them a comfortable subsistence. When they found that those who were to have paid them, appropriated to themselves the profit of their labours, they demanded justice. It was denied them, and they were determined to assert their right. As these depredations had been shared between the chief persons of the colony and the subaltern officers, the soldiers could obtain no redress. Their indignation against these rapacious extortioners rose to such a height, that they despised all authority. They had lived in an open rebellion for six months, when the British appeared before the place.

This was the time to conciliate the minds of both parties, and to unite in the common cause. The soldiers made the first advances; but their commanders mistrusted a generosity of which they themselves were incapable. It was firmly believed that the soldiers were only desirous of sallying out, that they might have an opportunity of deserting; and their own officers kept them in a manner prisoners, till a defence so ill managed had reduced them to the necessity of capitulating. The whole island shared the fate of Louisbourg, its only bulwark.

This valuable possession, restored to France by the treaty of Aix la Chapelle, was again attacked by the British in 1758. On the 2d of June, a fleet of 23 ships of the line and 18 frigates, carrying 16,000 well disciplined troops, anchored in Gabarus bay, within half a league of Louisbourg. As it was evident it would be to no purpose to land at a great distance, because it would be impossible to bring up the artillery and other necessities for a considerable siege, it had been attempted to render the landing impracticable near the town. In the prudent precautions that had been taken, the besiegers saw the dangers and difficulties they had to expect; but, far from being deterred by them, they had recourse to stratagem, and while by extending their line they threatened and commanded the whole coast, they landed by force of arms at the creek of Cormorant.

This place was naturally weak. The French had fortified it with a good parapet planted with cannon. Behind this rampart they had posted 2000 excellent soldiers and some Indians. In front they had made such a close hedge with branches of trees, that would have been very difficult to penetrate, even if it had not been defended. This kind of pallisade, which concealed all the preparations for defence, appeared at a distance to be nothing more than a verdant plain.

This would have preserved the colony, had the assail-

ants been suffered to complete their landing, and to advance with the confidence that they had but few obstacles to surmount. Had this been the case, overpowered at once by the fire of the artillery and the small arms, they would infallibly have perished on the shore or in the hurry of embarking; especially as the sea was just then very rough. This unexpected loss might have interrupted the whole project.

But all the prudent precautions that had been taken were rendered abortive by the impetuosity of the French. The English had scarce begun to move towards the shore, when their enemies hastened to discover the snare they had laid for them. By the brisk and hasty fire that was aimed at their boats, and still more by the premature removal of the boughs that masked the forces, which it was so much the interest of the French to conceal, they guessed at the danger they were going to rush into. They immediately turned back, and saw no other place to effect their landing but a rock, which had been always deemed inaccessible. General Wolf, though much taken up in reembarking his troops, and sending off the boats, gave the signal to major Scot to repair thither. That officer immediately removed to the spot with his men. His own boat coming up first, and sinking at the very instant he was stepping out, he climbed up the rock alone. He was in hopes of meeting with 100 of his men who had been sent thither some hours before. He found only ten. With these few, however, he gained the summit of the rock. Ten Indians and 60 Frenchmen killed two of his men, and mortally wounded three. In spite of his weakness, he stood his ground under cover of a thicket, till his brave countrymen, regardless of the boisterous waves and the fire of the cannon, came up to him, and put him in full possession of that important post, the only one that could secure their landing. The French, as soon as they saw that the enemy had got a firm footing on land, betook themselves to the only remaining refuge, and shut themselves up in Louisbourg. The fortifications were in a bad condition, because the sea sand, which they had been obliged to use, is by no means fit for works of masonry. The revetments of the several curtains were entirely crumbled away. There was only one casemate and a small magazine that were bomb-proof. The garrison which was to defend the place consisted only of 2900 men.

Notwithstanding all these disadvantages, the besieged were determined to make an obstinate resistance. It is scarce credible that the French were confirmed in their resolution by the courage of a woman. Madame de Drucourt was continually upon the ramparts, with her purse in her hand; and firing herself three guns every day, seemed to dispute with the governor her husband the glory of his office. The besieged were not dismayed at the ill success of their several sallies, or the masterly operations concerted by Admiral Boscawen and general Amherst. It was but at the eve of an assault, which it was impossible to sustain, that they talked of surrendering. They made an honourable capitulation; and the conqueror showed more respect for his enemy and for himself, than to sully his glory by any act of barbarity or avarice.—The possession was confirmed to Great Britain by the peace 1763; since which the fortifications have been blown up and the town of Louisbourg dismantled.

BRET.

Brettigaw
Breugel.

BRETTIGAW, a territory or valley of the Grisons, lying between the Rhine and the county of Tyrol, and along the river Lanquet. The fortrefs of Castels is the principal town.

BREVE, in law, is any writ directed to the chancellor, judges, sheriffs, or other officers, whereby a person is summoned, or attached, to answer in the king's court, &c.

BREVE Perquirere, the purchasing of a writ or licence for trial in the king's courts; whence comes the present use of paying 6s. 8d. fine to the king in suit, for money due on bond, where the debt is L. 40, and of 10s. where it is L. 100, &c.

BREVE de Reſto, is a writ of right or licence, for a person ejected, to sue for the possession of the estate detained from him.

BREVE, in music, a note or character of time, in the form of a diamond or square, without any tail, and equivalent to two measures or minims.

BREVET, in the French customs, denotes the grant of some favour or donation from the king; in which sense it partly answers to our warrant, and partly to letters-patent.

BREVET, more particularly denotes the commission of a subaltern officer, being only written on parchment, and without seal. A brevet officer is one whose rank in the army is above his pay: for instance, a brevet major serves only as a captain, and receives pay as such.

BREUGEL (Peter), an eminent painter, commonly called *Old Breugel*, to distinguish him from his son, was born at a village of the same name near Breda, in the year 1565; and was the first pupil of Peter Cock, whose daughter he married. It was customary with him to dress like a country-man, in order to be more easily admitted into the company of country-people, and be allowed to join in their frolics, by which means he became perfectly acquainted with their manners and gestures, of which he made excellent use in his pictures. He travelled to France and Italy, and for a long time studied landscapes on the mountains of Tyrol. His humorous turn of mind displayed itself in all his pictures, which generally consisted of country-dances, marriages, sports, and diversions; though he sometimes performed pieces from the historical parts of the holy Scriptures. At his return from Italy, he settled at Antwerp, and in his last illness caused his wife to gather together all his immodest pieces and burn them before his face. It is uncertain in what year he died. Of the works of old Breugel, the great duke of Tuscany has, Christ carrying his cross, with a great number of figures; and a country feast. The emperor has the tower of Babel, the massacre of the Innocents, and the conversion of St Paul, of his painting: the elector Palatine, a landscape, with St Philip baptizing queen Candace's eunuch; and St John preaching in the wilderness, with a great many figures. Old Breugel also, for his amusement, is said to have engraved some few plates of landscapes and grotesque subjects.

BREUGEL (Peter), the younger, was the son of the above mentioned artist, and named *Hellish Breugel*, from the horrible subjects he delighted to represent. He engraved also, according to M. Heineken; but his works are not specified. He died 1642.

BREUGEL (John), commonly called *Velvet Breugel*,

from his generally wearing velvet clothes, was the son of Peter Breugel, and born about the year 1575. He first applied himself to painting flowers and fruit, in which he excelled; and afterwards had great success in drawing landscapes, and views of the sea, set off with small figures. He lived long at Cologne, where he acquired great reputation. He travelled to Italy, where his fame had got before him; and where his fine landscapes, adorned with small figures superior to those of his father, gave very great satisfaction. If a good judgment may be formed from the great number of pictures he left behind him, all highly finished, he must have been exceedingly industrious. Nor did he satisfy himself with embellishing his own works only, but was very useful in this respect to his friends. Even Rubens made use of Breugel's hand in the landscape part of several of his small pictures, such as his Vertumnus and Pomona; the satyr viewing the sleeping nymph; and the terrestrial paradise, which is looked upon as his master-piece. He died in 1642. — Several of his works are to be seen in the archbishop's gallery at Milan; particularly a hunting-piece with a vast many figures; a landscape representing a desert, with the picture of St Hierom painted by Cerrano, alias Gro Baptista Crespi. In the Ambrosian library are 20 pieces of this masterly hand; particularly Daniel in the lion's den, the inside of the great church at Antwerp, the four seasons on copper, and the burning of Gomorrha. In the possession of the elector Palatine at Dusseldorp, Christ preaching on the sea-shore; a country-dance; a sea-port, with a great many figures: a coach and two chariots, with a multitude of figures and animals; a landscape, wherein Flora is crowned by a nymph; St John preaching in the wilderness; a small sea-landscape, and several other pieces. In the possession of the king of France, a woman playing with a dog, the battle between Alexander and Darius, both in wood: Orpheus in hell, &c.

BREVIARY, a daily office, or book of divine service, in the Romish church. It is composed of matins, lauds, first, third, sixth, and ninth vespers, and the compline or post communio.

The breviary of Rome in general, and may be used in all places; but on the model of this various others have been built, appropriated to each diocese, and each order of religious.

The breviary of the Greeks is the same in almost all churches and monasteries that follow the Greek rites: the Greeks divide the psalter into 20 parts. In general, the Greek breviary consists of two parts; the one containing the office for the evening, the other that of the morning, divided into matins, lauds, first, third, sixth, and ninth vespers, and the compline; that is, of seven different hours, on account of that saying of David, *Septies in die laudem dixi tibi*.

The institution of the breviary is not very ancient; there have been inserted in it the lives of the saints, full of ridiculous and ill-attested stories, which gave occasion to several reformations of it, by several councils, particularly those of Trent and Cologne; by several popes, particularly Pius V. Clement VIII. and Urban VIII.; and also by several cardinals and bishops, each lopping off some extravagancies, and bringing it nearer to the simplicity of the primitive offices. Originally, every body was obliged to recite the breviary every day; but by

Breugel,
Breviary.

Breviary
||
Brewer.

by degrees the obligation was reduced to the clergy only, who are enjoined, under penalty of mortal sin and ecclesiastical censures, to recite it at home, when they cannot attend in public. In the 14th century, there was particular reserve granted in favour of bishops, who were allowed, on extraordinary occasions, to pass there days without rehearsing the breviary.

This office was originally called *curfus*; and afterwards, the *breviarum*: which latter name imports that the old office was abridged; or rather, that this collection is a kind of abridgment of all the prayers.

The breviaries now in use are innumerable; the difference between them consists principally in the number and order of the psalms, hymns, paternosters, ave-Maries, creeds, magnificates, cantemus's, benedictus's, canticamus's, nunc dimittis's, miserere's hallelujah's, gloria patri's, &c.

BREVIARY, in Roman antiquity, a book first introduced by Augustus, containing an account of the application of the public money.

BREVIATOR, an officer under the eastern empire, whose business it was to write and translate briefs.—At Rome those are styled *breviators*, or *abbreviators*, who dictate and draw up the pope's briefs.

BREVIUS, A ROTULIS LIBERANDIS, a writ or command to a sheriff to deliver to his successor the county, with the appurtenances, and the rolls, writs, and other things to his office belonging.

BREVIER, among printers, a small kind of type or letter between bourgeois and minion.

BREVITY, in a general sense, that which denominates a thing brief or short.

BREVITY is more particularly used in speaking of the style or composition of discourse. Brevity of discourse is by some called *brachylogia* and *breviloquentia*; sometimes *laconismus*. Tacitus and Persius are remarkable for the brevity of their style. There are two kinds of brevity, one arising from dryness, poverty, and narrowness of genius; the other from judgment and reflection; which latter alone is laudable. Brevity is so essential to a tale, a song, and an epigram, that without it they necessarily languish and become dull. Rhetoricians make brevity one of the principal marks or conditions of eloquence; but the rules they prescribe for attaining it, are difficult to apply, so as still to keep the due medium between too much and too little. A just brevity is attained by using all the words which are necessary, and none but those which are necessary. Sometimes it may also be had, by choosing a word which has the force of several. It is this last kind which Quintilian admires so much in Sallust; and the imitation of which, by other writers, has caused so much obscurity.

BREVIUM custos. See CUSTOS.

BREVORDT, a town of Guelderland, in the United Netherlands, situated in E. Long. 6. 35. N. Lat. 52°.

BREWER (Anthony), a dramatic poet who flourished in the reign of king Charles I. and appears to have been held in high estimation by the wits of that time, as may be more particularly gathered from an elegant compliment paid to him in a poem called *Steps to Parnassus*, wherein he is supposed to have a magic power to call the muses to his assistance, and is even set on an equality with the immortal Shakespeare him-

self. There are, however, great disputes among the several writers as to the number of his works. Those which have been ascribed to him with any certainty are, 1. The country girl, a comedy. 2. The love-sick king, a comedy. And, 3. *Lingua*: a piece in regard to which Winstanley records a remarkable anecdote, which points it out to have been in some measure the innocent cause of those troubles that disturbed the peace of these realms in the middle of the 17th century. He tells us, that when this play was acted at Cambridge, Oliver Cromwell (then a youth) acted a part in it. The substance of the piece is a contention among the Senses for a crown which *Lingua* had laid for them to find. The part allotted to young Cromwell was that of *Tactus* or Touch; who having obtained the contested coronet, makes this spirited declamation:

Roses and bays, pack hence! this crown and robe
My brows and body circles and invests:
How gallantly it fits me! sure the slave
Measur'd my head who wrought this coronet.—
They lie that say complexions cannot change!
My blood's ennobled, and I am transform'd
Unto the sacred temper of a king.
Methinks I hear my noble parasites
Styling me *Cæsar*, or Great *Alexander*,
Licking my feet, &c.

It is said that he felt the whole part so warmly, and more especially the above-quoted speech, that it was what first fired his soul with ambition, and excited him from the possession of an imaginary crown to stretch his views to that of a real one; for the accomplishment of which he was content to wade through seas of blood.

BREWER, a person who professes the art of brewing.

There are companies of brewers in most capital cities; that of London was incorporated in 1427 by Henry VI. and that of Paris is still older.

The apparatus and utensils of a brewer, or a brew-house, are, A furnace made close and hollow for saving fuel, and with a vent for the smoke least it taint the liquor; a copper, which is preferable to lead; a mask-vat near the head; a cooler near the mask-vat; and a guile-vat under the cooler: adjoining to all are several clean tubs, to receive the worts and liquors.

BREWERS-HAVEN, a good harbour at the north end of the island of Chiloe on the coast of Chili, in South America, and in the South sea. The Dutch landed forces here in 1643, designing to get possession of some part of Chili; but they were driven from thence by the Spaniards and the natives. W. Long. 82. S. Lat. 42.

BREWING, the operation of preparing ale or beer from MALT.

Though the art of brewing is undoubtedly a part of chemistry, and certainly depends upon fixed and inva-^{No settled} riable principles as well as every other branch of that theory of science, these principles have never yet been thoroughly investigated. For want of a settled theory, therefore, the practice of this art is found to be precarious; and to succeed unaccountably with some, and misgive as unaccountably with others. Some few hints, however, have been thrown out, in order to establish a regular theory of brewing; the principal of which we shall lay before our readers.

The usual process of brewing is as follows: A quantity

Brewer,
Brewing.

Brewing.
Common
process de-
scribed.

quantity of water being boiled, is left to cool till the height of the steam be over; when so much is poured to a quantity of malt in the mashing tub, as makes it of a consistence stiff enough to be just well rowed up: after standing thus a quarter of an hour, a second quantity of the water is added, and rowed up as before: lastly, the full quantity of water is added; and that in proportion as the liquor is intended to be strong or weak. —This part of the operation is called *mashing*. —The whole now stands two or three hours, more or less according to the strength of the wort or the difference of weather, and is then drawn off into a receiver; and the mashing repeated for a second wort, in the same manner as for the first, only the water must be cooler than before, and must not stand above half the time. The two worts are then to be mixed, the intended quantity of hops added, and the liquor close covered up, gently boiled in a copper for the space of an hour or two; then let into the receiver, and the hops strained from it into the coolers. When cool, the barm or yeast is applied; and it is left to work or ferment till it be fit to tun up. For small beer there is a third mashing with the water near cold, and not left to stand above three quarters of an hour; to be hopped and boiled at discretion. For double beer or ale, the liquors resulting from the two first mashings must be used as liquor for the third mashing of fresh malt.

3
Difficulties
attending
it.

From considering this process, and the multiplicity of circumstances to be attended to in it, we may easily see that it must be a very precarious one. The success of the operation, *i. e.* the goodness of the beer, must depend upon the quality of the malt from which it is made; on that of the water with which it is infused; on the degree of heat applied in the infusion; on the length of time the infusion is continued; on the proper degree of boiling, the quantity and quality of the hops employed; on the proper degree of fermentation, &c.: all which, as already observed, have never yet been thoroughly investigated and ascertained.

4
Sir Robert
Murray's
method of
malt-ma-
king.

The manner of making malt Sir Robert Murray describes as follows. —Take good barley newly threshed, &c.; put about six English quarters in a stone trough full of water, where let it steep till the water be of a bright reddish colour; which will be in about three days, more or less according to the moisture or dryness, smallness or bigness, of the grain, the season of the year, or the temperature of the weather. In summer, malt never makes well; in winter it requires longer steeping than in spring or autumn. It may be known when it is steeped enough by other marks besides the colour of the water; as by the excessive swelling of the grain if it be over-steeped, and by too much softness; being, when it is in a right temper, like the barley prepared to make broth of. When it is sufficiently steeped, take it out of the trough, and lay it in heaps to let the water drain from it; then, after two or three hours, turn it over with a scoop, and lay it in a new heap, 20 or 24 inches deep. This is called the *coming heap*, in the right management whereof lies the principal skill. In this heap it may lie, 40 hours, more or less according to the forementioned qualities of the grain, &c. before it come to the right temper of malt; which that it may do equally, is mainly desired. While it lies in this heap, it must be carefully looked to after the first 15 or 16 hours: for about that time the grains

begin to put forth roots; which when they have equal- ly and fully done, the malt must, within an hour after, be turned over with a scoop; otherwise the grains will begin to put forth the blade and spire also, which must by all means be prevented. If all the malt do not come equally, but that which lies in the middle, being warmest, come the soonest; the whole must be turned, so that what was outmost may be inmost; and thus it is managed till it be all alike. As soon as the malt is sufficiently come, turn it over, and spread it to a depth not exceeding five or six inches; and by that time it is all spread out, begin and turn it over again three or four times. Afterwards turn it over in like manner once in four or five hours, making the heap deeper by degrees; and continue to do so for the space of 48 hours at least. This frequent turning it over, cools, dries, and deadens the grain; whereby it becomes mellow, melts easily in brewing, and separates entirely from the husk. Then throw up the malt into a heap as high as you can; where let it lie till it grow as hot as your hand can endure it, which usually happens in about the space of 30 hours. This perfects the sweetness and mellowness of the malt. After it is sufficiently heated, throw it abroad to cool, and turn it over again about six or eight hours after; and then lay it on a kiln with a hair-cloth or wire spread under it; where, after one fire which must last 24 hours, give it another more slow, and afterwards, if need be, a third: for if the malt be not thoroughly dried, it cannot be well ground, neither will it dissolve well in the brewing; but the ale it makes will be red, bitter, and unfit for keeping.

From this account of the process of malting, it appears, that, besides the proper management in wetting, turning, &c. the drying is an article of the utmost consequence; and concerning the proper degrees of heat to be employed for this purpose, Mr Combrune has related the following experiments. “In an earthen pan, of about two feet diameter, and three inches deep, I put as much of the palest malts, very unequally grown, as filled it on a level to the brim. This I placed over a little charcoal lighted in a small stove, and kept continually stirring it from bottom to top; at first it did not feel so damp as it did about half an hour after.

“In about an hour more, it began to look of a bright orange colour on the outside, and appeared more swelled than before. Every one is sensible how long-continued custom alone makes us sufficient judges of colours. Then I macerated some of the grains, and found they were nearly such as are termed *brown malts*. On stirring and making a heap of them towards the middle, I placed therein at about half depth the bulb of my thermometer, and found it rose to 140 degrees: here the malt felt very damp, and had but little smell,

“At 165 degrees I examined it in the same manner as before, and could perceive no damp: the malt was very brown; and, on being macerated, some few black specks appeared.

“Now many corns, nearest the bottom, were become black and burnt: with all the diligence I could use, I placed my thermometer nearly there, and it rose to 175 degrees. But the particles of fire, arising from the stove, act on the thermometer in proportion to the distance of the situation it is placed in; for which, through

Brewing.

5
Mr Com-
brune's ex-
periments
on the dry-
ing of malt;
Essay on
Brewing.

Brewing. through the whole experiment, an abatement of 5 degrees should be allowed, as near as I could estimate; so, a little after, putting my thermometer in the same position, where nearly half the corns were black, it showed 180 degrees. I now judged that the water was nearly all evaporated, and the heap grew black apace.

"Again, in the centre of the heap raised in the middle of the pan, I found the thermometer at 180 degrees; the corn tasted burnt; and the whole, at top, appeared about one half part a full brown, the rest black: on being macerated, still some white specks appeared; which I observed to proceed from those barley-corns which had not been thoroughly germinated, and whose parts cohering more together, the fire, at this degree of heat, had not penetrated them: their taste was insipid, the malts brittle, and readily parting from the skin: but the thermometer was now more various, as it was nearer to or farther from the bottom; and here I judged all the true malt to be charred.

"However, I continued the experiment; and, at 190 degrees, still found some white specks on macerating the grain; the acrospire always appearing of a deeper black or brown than the outward skin: the corn now fried at the bottom of the pan.

"I next increased the fire; the thermometer, placed in the mean between the bottom of the pan and the upper edge of the corn, showed 210 degrees. The malt hissed, fried, and smoked abundantly; though, during the whole process, the grain had been kept stirring, yet, on examination, the whole had not been equally affected with the fire. I found a great part thereof reduced to perfect cinders, easily crumbling to dust between the fingers, some of a very black hue without gloss, some very black with oil shining on the outside. Upon the whole, two third parts of the corn were perfectly black; the rest were of a deep brown, more or less so as they were hard, steely, or imperfectly germinated; which was easily discovered by the length of the shoot. Most of them seemed to have lost their cohesion, and had a taste resembling that of high roasted coffee.

"In the last stage of charring the malt, I set thereon a wine-glass inverted, into which arose a pinguious oily matter, which tasted very salt. Perhaps it may not be unnecessary to say, that the length of time this experiment took up was four hours, and that the effect it had both on myself and the person who attended me was such as greatly resembled the case of inebriation.

"Though, from hence, it is not possible to fix the exact degree of heat in which malts char, yet we see some black appeared when the thermometer was at 165 degrees, that some were entirely black at 175 and at 180 degrees, that the grains thus affected were such as had been perfectly germinated, and that those which bore a greater heat were defective in that point; whence we may conclude with an exactness that will be sufficient for the purposes of brewing, that true germinated malts are charred in heats between 175 and 180 degrees; and that, as these correspond to the degrees in which pure alcohol, or the finest spirit of the grain itself boils, or disengages itself therefrom, they may point out to us the reason of barley being the fittest grain for the purposes of brewing."

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From these experiments, our author has constructed **Brewing.** the following table of the different degrees of the dryness of malt, with the colour occasioned by each degree.

Deg.

- 119 White.
- 124 Cream colour.
- 129 Light yellow.
- 134 Amber colour.
- 138 High amber.
- 143 Pale brown.
- 148 Brown.
- 152 High brown.
- 157 Brown inclining to black.
- 162 High brown speckled with black.
- 167 Blackish brown with black specks.
- 171 Colour of burnt coffee.
- 176 Black.

"The above table (says he) not only shows us how to judge of the dryness of malt from its colour, but also when a grist is composed of several sorts of malt, what effect the whole will have when blended together by extraction; and although possibly some small errors may arise in judgments thus formed by our senses, yet as malts occupy different volumes in proportion to their dryness in the practice of brewing, if the result of the water coming in contact with the malt show the degree expected, such parcel of malt may be said to have been judged of rightly in the degree of dryness it was estimated to; so that the first trial either confirms, or sets us numerically right as to our opinion thereof."

It is found by experience, that the less heat employed in drying the malt, the shorter time will be required before the beer is fit to be used; and of this our author has given the following table.

Deg.

- | | | | |
|-----|-----------|-----|------------|
| 119 | 2 weeks. | 143 | 6 months. |
| 124 | a month. | 148 | 10 months. |
| 129 | 3 months. | 152 | 15 months. |
| 134 | 4 months. | 157 | 20 months. |
| 138 | 6 months. | 162 | two years. |

Lastly, Mr Combrune hath given the following table showing the tendency beers have to become fine, when properly brewed from malts of different degrees of dryness.

Deg. Colour of malt.

- 119 White.
- 124 Cream colour.
- 129 Light yellow.
- 134 Amber colour.

- 138 High amber.
- 143 Pale brown.

- 148 Brown.
- 152 High brown.

- 157 Brown inclining to black.

- 162 Brown speckled with black.

- 167 Blackish brown speckled with black.

- 171 Colour of burnt coffee.
- 176 Black.

These, when properly brewed, become spontaneously fine, even as far as 138°; when brewed for amber by repeated fermentations, they become pellucid.

By precipitation these grow bright in a short time.

With precipitation these require 8 or 10 months to be bright.

With precipitation these may be fined, but will never become bright.

These with difficulty can be brewed without setting the goods, and will by no means become bright, not even with the strongest acid menstruum.

3 Z

In

Brewing.

6
Mr Richardson's observations.

In a pamphlet entitled "Theoretic hints on an improved practice of brewing malt-liquors, &c. by John Richardson," we have the following observations on the nature and properties of malt.

"The process of making malt is an artificial or forced vegetation, in which the nearer we approach the footsteps of nature in her ordinary progress, the more certainly shall we arrive at that perfection of which the subject is capable. The farmer prefers a dry season to sow his corn in, that the common moisture of the earth may but gently insinuate itself into the pores of the grain, and thence gradually dispose it for the reception of the future shower, and the action of vegetation. The maltster cannot proceed by such slow degrees, but makes an immersion in water a substitute for the moisture of the earth, where a few hours infusion is equal to many days employed in the ordinary course of vegetation; and the corn is accordingly removed as soon as it appears fully saturated, lest a solution, and consequently a destruction, of some of its parts, should be the effect of a longer continuance in water, instead of that separation which is begun by this introduction of aqueous particles into the body of the grain.

"Were it to be spread thin after this removal, it would become dry, and no vegetation would ensue; but being thrown into the couch, a kind of vegetative fermentation commences, which generates heat, and produces the first appearance of germination. This state of the barley is nearly the same with that of many days continuance in the earth after sowing: but being in so large a body, it requires occasionally to be turned over, and spread thinner; the former to give the outward parts of the heap their share of the required warmth and moisture, both of which are lessened by exposure to the air; the latter to prevent the progress of the vegetative to the putrefactive fermentation, which would be the consequence of suffering it to proceed beyond a certain degree.

"To supply the moisture thus continually decreasing by evaporation and consumption, an occasional but sparing sprinkling of water should be given to the floor to recruit the languishing powers of vegetation, and imitate the shower upon the corn field. But this should not be too often repeated; for, as in the field, too much rain, and too little sun, produce rank stems and thin ears, so here would too much water, and of course too little dry warmth, accelerate the growth of the malt, so as to occasion the extraction and loss of such of its valuable parts, as by a slower process would have been duly separated and left behind.

"By the slow mode of conducting vegetation here recommended, an actual and minute separation of the parts takes place. The germination of the radicles and acrospire carries off the cohesive properties of the barley, thereby contributing to the preparation of the saccharine matter, which it has no tendency to extract or otherwise injure, but to increase and meliorate, so long as the acrospire is confined within the husk; and by how much it is wanting of the end of the grain, by so much does the malt fall short of perfection, and in proportion as it has advanced beyond, is that purpose defeated.

"This is very evident to the most common observation, on examining a kernel of malt in the different

stages of its progress. When the acrospire has shot but half the length of the grain, the lower part only is converted into that yellow saccharine flour we are solicitous about, whilst the other half affords no other signs of it than the whole kernel did at its first germination. Let it advance to two thirds of the length, and the lower end will not only have increased its saccharine flavour, but will have proportionally extended its bulk, so as to have left only a third part unmalted. This, or even less than this, is contended for by many maltsters, as a sufficient advance of the acrospire, which they say has done its business as soon as it has passed the middle of the kernel. But we need seek no farther for their conviction of error, than the examination here alluded to.

"Let the kernel be slit down the middle, and tasted at either end, whilst green; or let the effects of mastication be tried when it is dried off; when the former will be found to exhibit the appearances just mentioned, the latter to discover the unwrought parts of the grain, in a body of stony hardness, which has no other effect in the mash-tun than that of imbibing a large portion of the liquor, and contributing to the retention of those saccharine parts of the malt which are in contact with it; whence it is a rational inference, that three bushels of malt, imperfect in this proportion, are but equal to two of that which is carried to its utmost perfection. By this is meant the farthest advance of the acrospire, when it is just bursting from its confinement, before it has effected its enlargement. The kernel is then uniform in its internal appearance, and of a rich sweetness in flavour, equal to any thing we can conceive obtainable from imperfect vegetation. If the acrospire be suffered to proceed, the mealy substance melts into a liquid sweet, which soon passes into the blade, and leaves the husk entirely exhausted.

"The sweet thus produced by the infant efforts of vegetation, and lost by its more powerful action, revives and makes a second appearance in the stem, but is then too much dispersed and altered in its form to answer any of the known purposes of art.

"Were we to inquire, by what means the same barley, with the same treatment, produces unequal portions of the saccharine matter in different situations, we should perhaps find it principally owing to the different qualities of the water used in malting. Hard water is very unfit for every purpose of vegetation, and soft will vary its effects according to the predominating qualities of its impregnations. Pure elementary water is in itself supposed to be only the vehicle of the nutriment of plants, entering at the capillary tubes of the roots, rising into the body, and there dispersing its acquired virtues, perspiring by innumerable fine pores at the surface, and thence evaporating by the purest distillation into the open atmosphere, where it begins anew its round of collecting fresh properties, in order to its preparation for fresh service.

"This theory leads us to the consideration of an attempt to increase the natural quantity of the saccharum of malt by adventitious means; but it must be observed on this occasion, that no addition to water will rise into the vessels of plants, but such as will pass the filter; the pores of which appearing somewhat similar to the fine strainers or absorbing vessels employed by nature in her nicer operations, we by analogy conclude, that

Brewing. that properties so intimately blended with water as to pass the one, will enter and unite with the œconomy of the other, and *vice versa*.

“Supposing the malt to have obtained its utmost perfection, according to the criterion here inculcated, to prevent its farther progress and secure it in that state, we are to call in the assistance of a heat sufficient to destroy the action of vegetation, by evaporating every particle of water, and thence leaving it in a state of preservation, fit for the present or future purpose of the brewer.

“Thus having all its moisture extracted, and being by the previous process deprived of its cohesive property, the body of the grain is left a mere lump of flour, so easily divisible, that, the husk being taken off, a mark may be made with the kernel, as with a piece of soft chalk. The extractible qualities of this flour are, a saccharum closely united with a large quantity of the farinaceous mucilage peculiar to bread corn, and a small portion of oil enveloped by a fine earthy substance, the whole readily yielding to the impression of water applied at different times and different degrees of heat, and each part predominating in proportion to the time and manner of its application.

“In the curing of malt, as nothing more is requisite than a total extrication of every aqueous particle, if we had in the season proper for malting, a solar heat, sufficient to produce perfect dryness, it were practicable to reduce beers nearly colourless; but that being wanting, and the force of custom having made it necessary to give our beers various tinctures and qualities resulting from fire, for the accommodation of various tastes, we are necessitated to apply such heats in the drying as shall not only answer the purpose of preservation, but give the complexion and property required.

“To effect this with certainty and precision, the introduction of the thermometer is necessary; but the real advantages of its application are only to be known by experiment, on account of the different construction of different kilns, the irregularity of the heat in different parts of the same kiln, the depth of the malt, the distance of the bulb of the thermometer from the floor, &c. &c. for though similar heats will produce similar effects in the same situation, yet is the dispersion of heat in every kiln so irregular, that the medium spot must be found for the local situation of the thermometer ere a standard can be fixed for ascertaining effects upon the whole. That done, the several degrees necessary for the purposes of porter, amber, pale beers, &c. are easily discovered to the utmost exactness, and become the certain rule of future practice.

“Though custom has laid this arbitrary injunction of variety in our malt liquors, it may not be amiss to imitate the losses we often sustain, and the inconveniences we combat, in obedience to her mandate.

“The further we pursue the deeper tints of colour by an increase of heat beyond that which simple preservation requires, the more we injure the valuable qualities of the malt. It is well known that scorched oils turn black, and that calcined sugar assumes the same complexion. Similar effects are producible in malts, in proportion to the increase of heat, or the time of their continuing exposed to it. The parts of the whole being so united by nature, an injury cannot be done to the one, without affecting the other: accordingly

we find, that such parts of the subject, as might have been severally extracted for the purposes of a more intimate union by fermentation, are, by great heat in curing, burnt and blended so effectually together, that all discrimination is lost, the unfermentable are extracted with the fermentable, the integrant with the constituent, to a very great loss both of spirituousity and transparency. In paler malts, the extracting liquor produces a separation which cannot be effected in brown, where the parts are so incorporated, that unless the brewer is very well acquainted with their several qualities and attachments, he will bring over, with the burnt mixture of saccharine and mucilaginous principles, such an abundance of the scorched oils, as no fermentation can attenuate, no precipitants remove; for, being in themselves impediments to the action of fermentation, they lessen its efficacy, and being of the same specific gravity with the beer, they remain suspended in, and incorporated with the body of it, an offence to the eye, and a nausea to the palate to the latest period.”

The next consideration is the quality of the water to be employed in brewing; and here soft water is universally allowed to be preferable to hard, both for the purposes of mashing and fermentation. Transparency is, however, more easily obtained by the use of hard than soft water: first, from its inaptitude to extract such an abundance of that light mucilaginous matter, which, floating in the beer for a long time, occasions its turpidity; secondly, from its greater tendency to a state of quietude after the vinous fermentation is finished, by which those floating particles are more at liberty to subside; and, lastly, from the mutual aggregation of the earthy particles of the water with those of the materials, which by their greater specific gravity thus aggregated, not only precipitate themselves, but carry down also that lighter mucilage just mentioned. For these reasons, hard water is not well adapted to the brewing of porter, and such beers as require a fullness of palate, when drawn to the great lengths of the London brewery, and of some country situations.

The purity of water is determined by its lightness; and in this, distilled water only can claim any material degree of perfection. Rain water is the purest of all naturally produced: but by the perpetual exhalations of vegetables, and other fine substances floating in the atmosphere, it does not come down to us entirely free from those qualities which pond and river waters possess in a greater degree. These, especially of rivers running through fens and morasses, from the quantity of grass and weeds growing therein, imbibe an abundance of vegetable solutions which occasions them to contain more fermentable matter, and consequently to yield a greater portion of spirit; but at the same time induces such a tendency to acidity as will not easily be conquered. This is more to be apprehended towards the latter end of the summer than at any other time; because these vegetable substances are then in a state of decay, and thence more readily impart their pernicious qualities to the water which passes over them.

At such an unfavourable time, should the brewer be necessitated to pursue his practice, it will behove him to pay the utmost attention to the cause of this

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Quality of the water to be employed in brewing.

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Where there is the liberty of choice, we would recommend the use of that water which, from natural purity, equally free of the austerity of imbibed earths, and the rankness of vegetable saturation, has a soft fulness upon the palate, is totally flavourless, inodorous, and colourless; whence it is the better prepared for the reception and retention of such qualities as the process of brewing is to communicate and preserve.

The next thing to be considered is the proper degree of heat to be employed in making the infusion; and here it is evident, that though this must be an object of the utmost importance to the success of the operation, it is extremely difficult, perhaps impossible, to fix upon a precise standard that shall at all times fully answer the purpose. On this subject Mr Richardson presents us with the following observations.

8
Mr Richardson's observations on the degree of heat.

"The quality of the saccharine part of malt resembles that of common sugar, to which it is practicable to reduce it; and its characteristic properties are entirely owing to its intimate connection with the other parts of the malt, from which such distinguishing flavours of beers are derived as are not the immediate result of the hop. Were it not for these properties, the brewer might adopt the use of sugar, molasses, honey, or the sweet of any vegetable, to equal advantage; which cannot now be done, unless an eligible succedaneum be found to answer that purpose. As we are at present circumstanced, a search on the other side would turn more to the brewer's account. We have in malt a superabundance of the grosser principles; and would government permit the introduction of a foreign addition to the saccharine, which is too deficient, many valuable improvements might be made from it; as we could, by a judicious application of such adventitious principle, produce a second and third wort, of quality very little inferior to the first.

"But in these experiments a very particular attention would be necessary to the solvent powers of the water at different degrees of heat, and to the inquiry how far a menstruum saturated with one principle may be capable of dissolving another. Such a consideration is the more necessary on this occasion to direct us clear of two extremes equally disagreeable: the first is, that of applying the menstruum pure, and at such a heat as to bring off an over proportion of the oleaginous and earthy principles, which would occasion in the beer, thus wanting its natural share of saccharum, a harshness and austerity which scarce any time the brewer could allow would be able to dissipate; the other is, that of previously loading the menstruum with the adopted sweet in such an abundance as to destroy its solvent force upon the characteristic qualities we wish to unite with it, and thereby leave it a mere solution of sugar. The requisite mean is that of considering what portion of the saccharine quality has been extracted in the first wort, according to the quantity of water and degree of heat applied; and then to make such a previous addition of artificial sweet as will just serve to counterbalance the deficiency, and assimilate with that

Brewing. portion of the remaining principles we are taught to expect will be extracted with the succeeding wort.

"From the nature of the constituent principles of malt, it is easy to conceive, that the former, or saccharine or mucilaginous parts, yield most readily to the impression of water, and that at so low a degree of heat as would have no visible effect upon the latter. If, therefore, we are to have a certain proportion of every part, it is a rational inference, that the means of obtaining it rests in a judicious variation of the extracting heat according to the several proportions required.

"A low degree of heat, acting principally upon the saccharum, produces a wort replete with a rich soft sweet, fully impregnated with its attendant mucilage, and in quantity much exceeding that obtainable from increased heat; which by its more powerful insinuation into the body of the malt acting upon all the parts together, extracts a considerable portion of the oleaginous and earthy principles, but falls short in softness, fulness, sweetness, and quantity. This is occasioned by the coagulating property of the mucilage, which, partaking of the nature of flour, has a tendency to run into paste in proportion to the increase of heat applied; by which means it not only locks up a considerable part of the saccharum contained therein, but retains with it a proportionate quantity of the extracting liquor, which would otherwise have drawn out the imprisoned sweet, thence lessening both the quantity and quality of the worts. And this has sometimes been known to have had so powerful an effect, as to have occasioned the *setting of the goods*, or the uniting the whole into a pasty mass; for though heat increases the solvent powers of water in most instances, there are some in which it totally destroys them. Such is the presence of flour, which it converts into paste; besides those of blood, eggs, and some other animal substances, which it invariably tends to harden.

"From a knowledge of these effects, we form our ideas of the variations necessary in the heat of the extracting liquor: which are of more extensive utility than has yet been intimated, though exceedingly limited in their extent from one extreme to the other.

"The most common effects of too low a heat, besides sometimes producing immediate acidity, are an insipidity of the flavour of the beer, and a want of early transparency, from the superabundance of mucilaginous matter extracted by such heats, which, after the utmost efforts of fermentation, will leave the beer turbid with such a cloud of its lighter feculencies as will require the separation and precipitation of many months to disperse.

"The contrary application, of too much heat, at the same time that it lessens the mucilage, has, as we have seen before, the effect of diminishing the saccharum also; whence that lean thin quality observable in some beers; and, by extracting an over proportion of oleaginous and earthy particles, renders the business of fermentation difficult and precarious, and impresses an austerity on the flavour of the liquor which will not easily be effaced.

"Yet the true medium heat for each extract cannot be universally ascertained. An attention not only to the quality of the malt, but to the quantity wetted, is absolutely necessary to the obtaining every due advantage;

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tage; nor must the period at which the beer is intended for use be omitted in the account. The quality of the water also claims a share in the consideration, in order to supply that deficient thinness and want of solvent force in hard, and to allow for the natural fulness and fermentative quality of soft; a particular to which London in a great measure owes the peculiar mucilaginous and nutritious quality of its malt liquors.

Although the variations above alluded to are indispensable, it is easy to conceive from the small extent of the utmost variety, that they cannot be far distant. If, therefore, we know that a certain degree extracts the first principles in a certain proportion, we need not much consideration to fix upon another degree that shall produce the required proportion of the remaining qualities, and effect that equal distribution of parts in the extract which it is the business of fermentation to form into a consistent whole."

9
Of boiling
worts.

The principal use of boiling, as it respects the worts particularly, is to separate the grosser or more palpable parts of the extract, preparatory to that more minute separation which is to be effected in the gyle tun. The eye is a very competent judge of this effect; for the concretions into which the continued action of boiling forms those parts are obvious to the slightest inspection, whilst the perfect transparency of the interstices of the worts points out its utility in promoting that desirable quality in the beer. These coagulable parts are formed from the superabundant mucilage already mentioned; and hence they are found in greater proportion in the first worts than in those that come after; at the same time, they are in these last so mingled with a quantity of oleaginous matter, that they become much more difficultly coagulable in the weak worts than in such as are stronger, and hence these require to be much longer boiled than the others.

During this operation the hops are generally added, which are found to be absolutely necessary for preventing the too great tendency of beer to acidity. The fine essential oil of hops being most volatile and soonest extracted, we are therefore taught the advantage of boiling the first wort no longer than is sufficient to form the extract, without exposing it to the action of the fire so long as to dissipate the finer parts of this most valuable principle, and defeat the purpose of obtaining it. To the subsequent worts we can afford a larger allowance, and pursue the means of preservation so long as we can keep in view those of flavour; to which no rules can positively direct, the process varying with every variety of beer, and differing as essentially in the production of porter and pale ale as the modes of producing wine and vinegar.

The consequence of not allowing a sufficient time for the due separation of the parts of the wort and extraction of the requisite qualities of the hop must be obvious. If we proceed to the other extreme, we have every thing to apprehend from the introduction of too large a quantity of the grosser principles of the hop, which are very inimical to fermentation; and from impairing the fermentative quality of the worts themselves, by suffering their too long exposure to the action of the fire passing through them, whereby they are reduced to a more dense consistence, and their parts too intimately blended to yield to the separating force of fer-

mentation with that ease the perfection of the product requires.

The last step in the process of brewing is to ferment the liquor properly; for if this is not done, whatever care and pains have been taken in the other parts, they will be found altogether insufficient to produce the liquor desired. The first thing to be done here is to procure a proper ferment; for though all fermentable liquors would in time begin to ferment of themselves, yet, being also susceptible of putrefaction, the vinous and putrefactive ferments would both take place at the same time in such a manner that the product would be entirely spoiled. There are only two kinds of artificial ferments procurable in large quantity, and at a low price, viz. beer-yeast and wine-lees. A prudent management of these might render the business of the brewery for distillation, as in the business of the malt-distiller, &c. much more easy and advantageous*. Brewers • See Distillation.

10
Of fermenta-

tion.

have always found it a considerable difficulty to procure these ferments in sufficient quantities, and preserve them constantly ready for use; and this has been so great a discouragement to the business, that some have endeavoured to produce other ferments, or to form mixtures or compounds of particular fermentable ingredients: but this has been attempted without any great success, all these mixtures falling short even of common-baker's leaven in their use. Whoever has a turn for making experiments and attempting improvements of this kind, will find it much easier and more advantageous to preserve and raise nurseries of the common ones, than to devise mixtures of others. Yeast may be preserved by freeing it from its moister parts. This may be done by the sun's heat, but slowly and imperfectly. The best method is by gently pressing it in canvas bags: thus the liquid part, in which there is scarce any virtue, will be thrown off, and the solid will remain behind in form of a cake, which may be packed in a barrel or box, and will keep for a long time sweet and fragrant, and fit for the finest uses; and the same method may be taken either with wine-lees or the flowers of wine. The former may be brought from abroad with great ease in this manner: the latter may be made with us from the lees, by only dissolving them in water, and stirring them about with a stick; by this means, the lighter, more moveable, and more active part of the lees will be thrown up to the top, and may be taken off and preserved, in the manner above mentioned, in any quantity desired. By this means, an easy method is found of raising an inexhaustible fund; or a perpetual supply of the most proper ferments may be readily formed in the way of successive generation, so as to cut off all future occasion of complaint for want of them in the business of distillation. It must be observed that all ferments abound in essential oil much more than the liquors which produce them; whence they very strongly retain the particular flavour and scent of the subject from whence they were made. It is requisite, therefore, before the ferment is applied, to consider what flavour ought to be introduced, and accordingly what species of ferment is most suited to the liquor. The alteration thus caused by ferments is so considerable, as to determine or bring over any naturally fermentable liquor of a neutral kind to be of the same kind with that which yielded the ferment. The benefit of this, how-

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however, does not extend to malt, or to any other matter that does not naturally yield a tolerably pure and tasteless spirit, as it otherwise makes not a simple, pure, and uniform flavour, but a compound and mixed one.

The greatest circumspection and care are necessary in regard to the quality of the ferment. It must be chosen perfectly sweet and fresh: for all ferments are liable to grow musty and corrupt; and if in this case they are mixed with the fermentable liquor, they will communicate their nauseous and filthy flavour to it in such a manner as never to be got off. If the ferment is sour, it must by no means be used for any liquor; for it will communicate its flavour to the whole, and even prevents its rising to a head, and give it an acetous, instead of a vinous, tendency. When the proper quantity is got ready, it must be put to the liquor in a state barely tepid, or scarce luke-warm. The best method of putting them together, so as to make the fermentation strong and quick, is as follows. When the ferment is solid, it must be broken to pieces, and gently thinned with some of the warm liquor; but a complete or uniform solution of it is not to be expected or desired, as this would weaken its efficacy for the future business. The whole intended quantity being thus loosely mixed in some of the luke-warm liquor, and kept near the fire or elsewhere in a tepid state, free from too rude commerce with the external air, more of the insensibly warm liquor ought at proper intervals to be brought in, till thus by degrees the whole quantity is set at work together. When the whole is thus set at work, secured in a proper degree of warmth, and kept from a too free intercourse with the external air, it becomes as it were the business of nature to finish the operation.

In the operation of fermentation, however, the degree of heat employed is of the utmost consequence. In forming the extracts of the malt, the variation of a few degrees of heat produces an important difference in the effect. In the heat of fermentation, similar consequences result from similar variety. Under a certain regulation of the process, we can retain in the beer, as far as art is capable, the finer mucilage, and thereby preserve that fulness upon the palate which is by many so much admired: on the other hand, by a slight alteration we can throw it off, and produce that evenness and uniformity of flavour which has scarce any characteristical property, and is preferred by some only for want of that heaviness which they complain of in full beers. If a more vinous racy ale be required, we can, by collecting and confining the operation within the body of the wort, cause the separation and absorption of such an abundant portion of the oleaginous and earthy principles, as to produce a liquor in a perfect state at the earliest period, and so highly flavoured as to create a suspicion of an adventitious quality. But though all this may be done, and often hath been done, the proper management of fermenting liquors depends so much upon a multiplicity of slight and seemingly unimportant circumstances, that it hath never yet been laid down in an intelligible manner; and no rules, drawn from any thing hitherto published on the subject of brewing, can be at all sufficient to direct any person in this matter, unless he hath had considerable opportunities of observing the practice of a brewhouse.

BREY, a town of Germany, on the frontiers of

Brabant, seated on a rivulet, in E. Long. 5. 35. N. Lat. 51. 6.

BREYNIA, in botany, a synonyme of the capparis. See CAPPARIS.

BRIANCON, a town of France, in upper Dauphiny, capital of the Brianconnois. E. Long. 6. 45. N. Lat. 44. 46.

BRIANCONNOIS, a territory of France, in Dauphiny, bounded by Grenoblois, Gapennois, Ambrunois, Piedmont, and Savoy. It comprehends several valleys, which lie among the mountains of the Alps; and though it is extremely cold, yet it is fertile in corn and pastures. The inhabitants have a great deal of wood; yet they choose to be in the stables with their cattle six months in the year, to keep themselves warm. Briancon is the capital town.

BRIAR, in botany, the English name of a species of rose. See ROSA.

BRIARE, a town of France, in the Gatinois, seated on the river Loire. It is remarkable for nothing but a long street full of inns and farriers, it being on the great road to Lyons; and the canal of Briare, which is 33 miles in length, and maintains a communication between the Loire and the Seine, by means of the Loing. E. Long. 2. 45. N. Lat. 47. 40.

BRIAREUS, in fabulous history, a giant; the son of Æther, Titan, or Cælus, and Terra. This was his name in heaven; on earth he was called *Ægeon*. He was of singular service to Jupiter, when Juno, Pallas, Neptune, and the rest of the gods, endeavoured to bind him in chains and dethrone him. Afterwards, however, he conspired with the rest of his gigantic brethren to dethrone Jupiter. Virgil, on this occasion, describes him as having 100 hands, 50 heads, and breathing out fire†. The fable says that Jupiter, to punish him, threw him under mount Ætna, which, as often as he moves, belches out fire. See ÆTNA.

BRIBE, a reward given to pervert the judgment. See the next article.

The word is French, *bribe*, which originally denotes a bit, fragment, or relic of meat taken off the table; on which footing, bribe imports as much as *panis mendicatus*, and still keeps up the idea of the matter whereof bribes anciently consisted. Hence also the Spaniards use *bribar* and *brivar* for *begging*; and *brivia brivoneria*, and *brivonismo*, for *beggary*. In middle-age writers, a bribe given a judge is called *quato litis*, and the receiver, *campi particeps*, or *cambi particeps*; because the spoils of the field, i. e. the profits of the cause, were thus shared with the giver.

BRIBERY, in law, is a high offence, where a person in a judicial place takes any fee, gift, reward, or brockage, for doing his office, but of the king only. But, taken largely, it signifies the receiving or offering any undue reward to or by any person concerned in the administration of public justice, whether judge, officer, &c. to act contrary to his duty; and sometimes it signifies the taking or giving a reward for a public office.

In the east it is the custom never to petition any superior for justice, not excepting their kings, without a present. This is calculated for the genius of despotic countries; where the true principles of government are never understood, and it is imagined that there is no

Brevnia
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Bribery.

† Æn. 2.
365.

Bribery

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obligation due from the superior to the inferior, no relative duty owing from the governor to the governed. The Roman law, though it contained many severe injunctions against bribery, as well for selling a man's vote in the senate or other public assembly, as for the bettering of common justice; yet, by a strange indulgence in one instance, it tacitly encouraged this practice; allowing the magistrate to receive small presents, provided they did not on the whole exceed 100 crowns a year; not considering the insinuating nature and gigantic progress of this vice, when once admitted. Plato, therefore, in his ideal republic, orders those who take presents for doing their duty to be punished in the severest manner: and by the laws of Athens, he that offered a bribe was also prosecuted, as well as he that received a bribe. In England this offence of taking bribes is punished, in inferior officers, with fine and imprisonment; and in those that offer a bribe, though not taken, the same. But in judges, especially the superior ones, it has been always looked upon as so heinous an offence, that the chief justice Thorpe was hanged for it in the reign of Edward III. By a statute 11 Henry IV. all judges and officers of the king convicted of bribery, shall forfeit triple the bribe, be punished at the king's will, and be discharged from his service for ever. And some notable examples have been made in parliament, of persons in the highest stations, and otherwise very eminent and able, but contaminated with this forbidden vice. Thus in the reign of king James I. the earl of M. lord treasurer of England, being impeached by the commons, for refusing to hear petitions referred to him by the king, till he had received bribes, &c. was, by sentence of the lords, deprived of all his offices, and disabled to hold any for the future, or to sit in parliament; he was also fined 50,000 l. and imprisoned during the king's pleasure. In the 11th year of king George I. the lord chancellor M—— had a somewhat milder punishment: he was impeached by the commons, with great zeal, for bribery, in selling the places of masters in chancery for exorbitant sums, and other corrupt practices, tending to the great loss and ruin of the suitors of that court; and the charge being made good against him, being before divested of his office, he was sentenced to pay a fine of 30,000 l. and imprisoned till it was paid. It is said that one of the peers, if not two, who voted against him, had been possessed of the office of chancellor, and sold the places of masters in chancery whenever vacant.

BRIBERY in Elections. See ELECTIONS.

BRICIANI, those of the order of that name. This was a military order, instituted by St Bridget, queen of Sweden, who gave them the rules and constitutions of those of Malta and St Augustin. This order was approved by pope Urban V. They were to fight for the burying of the dead, to relieve and assist widows, orphans, the lame, sick, &c.

BRICK, a fat reddish earth, formed into long squares, four inches broad, and eight or nine long, by means of a wooden mould, and then baked or burnt in a kiln, to serve the purposes of building.

Bricks are of great antiquity, as appears by the sacred writings, the tower and walls of Babylon being built with them.

The Greeks chiefly used three kinds of bricks; the first whereof was called [*didoron*], i. e. of two palms;

the second [*tetradoron*], of four palms; the third [*pentadoron*], of five palms. They had also other bricks, just half each of those, to render their works more solid, and also more agreeable to the sight, by the diversities of the figures and sizes of the bricks.

The dimensions of the brick chiefly used by the Romans, according to Pliny, were a foot and a half long, and a foot broad; which measures agree with those of several Roman bricks in England, which are about 17 inches long, and 11 broad, of our measure. Sir Henry Wotton speaks of a sort of bricks at Venice, of which stately columns were built; they were first formed in a circular mould, and cut, before they were burnt, into four or more quarters or sides; afterwards, in laying, they were jointed so close, and the points concentrated so exactly, that the pillars appeared one entire piece. The ordinary Paris brick is eight inches long, four broad, and two thick, French measure, which makes something more than ours. But this smallness is an advantage to a building, the strength of which consists much in the multitude of angles and joints, at least if well laid, and having a good bond.

Bricks among us are various, according to their various forms, dimensions, uses, method of making, &c. The principal are, compass-bricks, of a circular form, used in steining of walls: concave, or hollow bricks, on one side flat like a common brick, on the other hollowed, and used for conveyance of water: feather-edged bricks, which are like common statute-bricks, only thinner on one edge than the other, and used for penning up the brick pannels in timber buildings: coggings bricks are used for making the indented works under the coping of walls built with great bricks: coping bricks, formed on purpose for coping of walls: Dutch or Flemish bricks, used to pave yards, stables, and for soap-boilers vaults and cisterns: clinkers, such bricks as are glazed by the heat of the fire in making: sandel or samel-bricks, are such as lie outmost in a kiln or clamp, and consequently are soft and useless, as not being thoroughly burnt: great bricks are those twelve inches long, six broad, and three thick, used to build fence-walls: plaster or buttress bricks, have a notch at one end, half the breadth of the brick; their use is to bind the work which is built of great brick: statute-bricks, or small common bricks, ought, when burnt, to be nine inches long, four and a quarter broad, and two and a half thick; they are commonly used in paving cellars, sinks, hearths, &c.

Worlidge, and others after him, have endeavoured to excite brick-makers to try their skill in making a new kind of brick, or a composition of clay and sand, whereof to form window-frames, chimney-pieces, door-cases, and the like. It is to be made in pieces fashioned in moulds, which, when burnt, may be set together with a fine red cement, and seem as one entire piece, by which may be imitated all manner of stone work. The thing should seem feasible, by the earthen pipes made fine, thin, and durable, to carry water under-ground at Portsmouth; and by the earthen backs and grates for chimneys, formerly made by Sir John Winter, of a great bigness and thickness. If chimney-pieces thus made in moulds, and dried and burnt, were not found smooth enough, they might be polished with sand and water; or were care taken, when they were half dry in the air, to have them polished with an instrument of copper

Brick

† Wotton.
Elem. of
Architettura

Supplement
to Chambers.

Brick.

copper or iron, then leave them till they were dry enough to burn, it is evident they would not want much polishing afterwards. The work might even be glazed, as potters do their fine earthen ware, either white or of any other colour; or it might be veined in imitation of marble, or be painted with figures of various colours, which would be much cheaper, perhaps equally durable, and as beautiful, as marble itself.

Bricks are commonly red; though there are some also of a white colour, for which fort Walpit in Suffolk is famous. Bricks may be made of any earth that is clear of stones, even sea-oufe; but all will not burn red, a property peculiar to earths which contain ferruginous particles. In England, bricks are chiefly made of a hazely, yellowish-coloured, fatty earth, somewhat reddish, vulgarly called *loam*. The earth, according to Leibourn, ought to be dug before winter, but not made into bricks before spring. For the making of such bricks as will stand the fiercest fires, Sturbridge clay or Windfor loam are esteemed the best. In general, the earth whereof bricks are made, ought not to be too sandy, which would render them heavy and brittle; nor too fat, which would make them crack in drying.

The first step in the process of brick-making is casting the clay, or earth. The next step is to tread or temper it, which ought to be performed doubly of what is usually done; since the goodness of the bricks depends chiefly upon this first preparation. The earth itself, before it is wrought, is generally brittle and dusty; but adding small quantities of water gradually to it, and working and incorporating it together, it opens its body, and tinges the whole with a tough, gluey band or substance. If, in the tempering, you overwater them, as the usual method is, they become dry and brittle, almost as the earth they are made of; whereas, if duly tempered, they become smooth and solid, hard and durable. A brick of this last sort takes up near as much earth as a brick and a half made the contrary way; in which the bricks are spongy, light, and full of cracks, partly through want of due working, and partly by mixing of ashes and light sandy earth to make it work easy and with greater dispatch; as also to save culm or coals in the burning. We may add, that for bricks made of good earth, and well tempered, as they become solid and ponderous, so they take up a longer time in drying and burning than the common ones; and that the well drying of bricks before they are burnt, prevents their cracking and crumbling in the burning.

Bricks are burnt either in a kiln or clamp. Those that are burnt in a kiln, are first set or placed in it; and then the kiln being covered with pieces of bricks, they put in some wood to dry them with a gentle fire; and this they continue till the bricks are pretty dry, which is known by the smoke's turning from a darkish colour to transparent smoke: they then leave off putting in wood, and proceed to make ready for burning; which is performed by putting in brush, furze, spray, heath, brake or fern faggots: but before they put in any faggots, they dam up the mouth or mouths of the kiln with pieces of bricks (which they call *shinlog*) piled up one upon another, and close it up with wet brick-earth instead of mortar. The shinlog they make so high, that there is but just room above it to thrust in a faggot: then they proceed to put in more faggots, till the kiln

and its arches look white, and the fire appears at the top of the kiln; upon which they slacken the fire for an hour, and let all cool by degrees. This they continue to do, alternately heating and slacking, till the ware be thoroughly burnt, which is usually effected in 48 hours.

About London they chiefly burn in *clamps*, built of the bricks themselves, after the manner of arches in kilns, with a vacancy between each brick, for the fire to play through; but with this difference, that instead of arching, they span it over by making the bricks project one over another on both sides of the place, for the wood and coals to lie in till they meet, and are bounded by the bricks at the top, which close all up. The place for the fuel is carried up straight on both sides, till about three feet high; then they almost fill it with wood, and over that lay a covering of sea-coal, and then overspan the arch; but they strew sea-coal also over the clamp, betwixt all the rows of bricks; lastly, they kindle the wood, which gives fire to the coal; and when all is consumed, then they conclude the bricks are sufficiently burnt.

In Dr Percival's essays*, we have the following experiment of the effects of bricks on water. "Two or three pieces of common brick were steeped four days in a basin full of distilled water. The water was then decanted off, and examined by various chemical tests. It was immiscible with soap, struck a lively green with syrup of violets, was rendered slightly lactescent by the volatile alkali, and quite milky by the fixed alkali and by a solution of saccharum saturni. The infusion of tormentil root produced no change in it." This experiment, he observes, affords a striking proof of the impropriety of lining wells with brick, a practice very common in many places, and which cannot fail of rendering the water hard and unwholesome. Clay generally contains a variety of heterogeneous matters. The coloured loams often participate of bitumen, and the ochre of iron. Sand and calcareous earth are still more common ingredients in their composition; and the experiments of Mr Geoffrey and Mr Pott prove, that the earth of alum also may in large quantity be extracted from clay. Now as clay is exposed to the open air for a long space of time, is then moulded into bricks, and burnt, this process resembles in many respects that by which the alum-stone is prepared. And it is probable that the white efflorescence which is frequently observable on the surface of new bricks, is of an aluminous nature. The long exposure of clay to the air before it is moulded into bricks, the sulphureous exhalations of the pit-coal used for burning it, together with the suffocating and bituminous vapour which arises from the ignited clay itself, sufficiently account for the combination of a vitriolic acid with the earth of alum.

Oil of Bricks, olive oil imbibed by the substance of bricks, and afterwards distilled from it. This oil was once in great repute for curing many diseases, but is now justly laid aside.

Brick-Layer, an artificer, whose business is to build with bricks, or make brick work.

Brick-layers work, or business, in London, includes tiling, walling, chimney-work, and paving with bricks and tiles. In the country it also includes the mason's and plasterer's business.

The materials used by brick-layers are bricks, tiles, mortar,

Brick.

* Vol. I. p. 392.

Brick
||
Bride.

mortar, laths, nails, and tyle-pins. Their tools are a brick trowel, wherewith to take up mortar; a brick-ax, to cut bricks to the determined shape; a saw, for sawing bricks; a rub-stone, on which to rub them; also a square, wherewith to lay the bed or bottom, and face or surface of the brick, to see whether they are at right angles; a bevel, by which to cut the under sides of bricks to the angles required; a small tranel of iron, wherewith to mark the bricks; a float-stone, with which to rub a moulding of brick to the pattern described; a banker, to cut the bricks on; line-pins to lay their rows or courses by; plumb-rule, whereby to carry their work upright; level, to conduct it horizontal; square, to set off right angles; ten-foot-rod, wherewith to take dimensions; jointer, wherewith to run the long joints; rammer, wherewith to beat the foundation; crow and pick-ax, wherewith to dig through walls.

The London brick-layers make a regular company, which was incorporated in 1568; and consists of a master, two wardens, 20 assistants, and 78 on the livery.

BRICK-Laying, the art of framing edifices of bricks.

Moxon hath an express treatise on the art of brick-laying; in which he describes the materials, tools, and method of working, used by brick-layers.

Great care is to be taken, that bricks be laid joint on joint in the middle of the walls as seldom as may be; and that there be good bond made there, as well as on the outsides. Some brick-layers, in working a brick and half wall, lay the header on one side of the wall perpendicular to the header on the other side, and so all along the whole course; whereas, if the header on one side of the wall were toothed as much as the stretcher on the other side, it would be a stronger tooth-ing, and the joints of the headers of one side would be in the middle of the headers of the course they lie upon of the other side. If bricks be laid in winter, let them be kept as dry as possible; if in summer, it will quit cost to employ boys to wet them, for that they will then unite with the mortar better than if dry, and will make the work stronger. In large buildings, or where it is thought too much trouble to dip all the bricks separately, water may be thrown on each course after they are laid, as was done at the building the physician's college, by order of Dr Hooke. If bricks are laid in summer, they are to be covered; for if the mortar dries too hastily, it will not bind so firmly to the bricks as when left to dry more gradually. If the bricks be laid in winter, they should also be covered well, to protect them from rain, snow and frost; which last is a mortal enemy to mortar, especially to all such as have been wetted just before the frost assaults it.

BRICK-Maker, is he who undertakes the making of BRICKS. This is mostly performed at some small distance from cities and towns; and though some, through ignorance, look upon it as a very mean employ, because laborious, yet the masters about London, and other capital cities, are generally men of substance.

BRICKING, among builders, the counterfeiting of a brick-wall on plaster: which is done by smearing it over with red ochre, and making the joints with an edged tool; these last are afterwards filled with a fine plaster.

BRIDE, a woman newly married. Among the Greeks, it was customary for the bride to be conducted from her father's house to her husband's in a chariot,

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the evening being chosen for that purpose, to conceal her blushes; she was placed in the middle, her husband sitting on one side, and one of her most intimate friends on the other; torches were carried before her, and she was entertained in the passage with a song suitable to the occasion. When they arrived at their journey's end, the axle-tree of the coach they rode in was burnt, to signify that the bride was never to return to her father's house.—Among the Romans, the bride was to seem to be ravished by force from her mother, in memory of the rape of the Sabines under Romulus; she was to be carried home in the night-time to the bridegroom's house, accompanied by three boys, one whereof carried a torch, and the other two led the bride; a spindle and distaff being carried with her: she brought three pieces of money called asses, in her hand to the bridegroom, whose doors on this occasion were adorned with flowers and branches of trees: being here interrogated who she was, she was to answer *Caia*, in memory of *Caia Cecilia*, wife of *Tarquin the Elder*, who was an excellent *lanifica* or spinstrefs; for the like reason, before her entrance, she lined the door-posts with wool, and smeared them with grease. Fire and water being set on the threshold, she touched both; but starting back from the door refused to enter, till at length she passed the threshold, being careful to step over without touching it: here the keys were given her, a nuptial supper was prepared for her, and minstrels to divert her; she was seated on the figure of a priapus, and here the attendant boys resigned her to the *pronuba*, who brought her into the nuptial chamber and put her to bed. This office was to be performed by matrons who had only been once married, to denote that the marriage was to be for perpetuity.

BRIDEGROOM, a man newly married, the spouse of the bride.

The Spartan bridegrooms committed a kind of rape upon their brides. For matters being agreed on between them two, the woman that contrived and managed the match, having shaved the bride's hair close to her skin, dressed her up in man's clothes, and left her upon a mattress: this done, in came the bridegroom, in his usual dress, having supped as ordinary, and stealing as privately as he could to the room where the bride lay, and untying her virgin girdle, took her to his embraces; and having staid a short time with her returned to his companions, with whom he continued to spend his life, remaining with them by night as well as by day, unless he stole a short visit to his bride, which could not be done without a great deal of circumspection, and fear of being discovered. Among the Romans, the bridegroom was decked to receive his bride; his hair was combed and cut in a particular form; he had a coronet or chaplet on his head, and was dressed in a white garment.

By the ancient canons, the bridegroom was to forbear the enjoyment of his bride the first night, in honour of the nuptial benediction given by the priest on that day*. In Scotland, and perhaps also some parts of England, a custom called *marbet*, obtained; by which the lord of the manor was intitled to the first night's habitation with his tenant's bride †

BRIDEWELL, a work-house, or place of correction for vagrant, strumpets, and other disorderly persons.—These are made to work, being maintained with

Bride-
groom
||
Bridewell.

Johns.
Eccel. Law.
an. 740.
§ 88.

† See *Mar-*
bet.

Bridewell,
Bridge.

clothing and diet; and when it seems good to their governors, they are sent by passes into their native countries; however, while they remain here, they are not only made to work, but, according to their crimes, receive once a fortnight such a number of stripes as the governor commands.

BRIDWELL, near Fleet-street, is a foundation of a mixt and singular nature, partaking of the hospital, the prison, and workhouse; it was founded in 1553, by Edward VI. who gave the place where King John had formerly kept his court, and which had been repaired by Henry VIII. to the city of London, with 700 merks of land, bedding, and other furniture. Several youths are sent to the hospital as apprentices to manufacturers, who reside there; they are clothed in blue doublets and breeches, with white hats. Having faithfully served their time of seven years, they have there freedom, and a donation of L. 10 each, for carrying on their respective trades.

BRIDGE, a work of masonry or timber, consisting of one or more arches built over a river, canal, or the like, for the conveniency of passing the same. See ARCHITECTURE, n° 122; and CANAL.

The first inventor of bridges, as well as of ships and crowns, is by some learned men supposed to be Janus: their reason is, that on several ancient Greek, Sicilian, and Italian coins, there are represented on one side a Janus, with two faces; and on the other a bridge, or a crown or a ship.

Bridges are a sort of edifices very difficult to execute on account of the inconvenience of laying foundations and walling under water. The earliest rules and instructions relating to the buildings of bridges are given by Leon Baptista Alberti, *Archit.* l. viii. Others were afterwards laid down by Palladio, l. iii. Serlio, l. iii. c. 4. and Scamozzi, l. v. all of which are collected by M. Blondel, *Cours d'Archit.* p. 629, *seq.* The best of them are also given by Goldman, *Baukhurst*, l. iv. c. 4. p. 134. and Hawkesmoor's History of London bridge, p. 26, *seq.* M. Gautier has a piece express on bridges, ancient and modern; *Trait des Ponts*, Paris 1716, 12mo.

The parts of a bridge are, The piers; the arches; the pavement, or way over for cattle and carriages; the foot-way on each side, for foot-passengers; the rail or parapet, which incloses the whole; and the buttments or ends of the bridge on the bank.

The conditions required in a bridge are, That it be well-designed, commodious, durable, and suitably decorated. The piers of stone-bridges should be equal in number, that there may be one arch in the middle, where commonly the current is strongest; their thickness is not to be less than a sixth part of the span of the arch, nor more than a fourth; they are commonly guarded in the front with angular sterlings, to break the force of the current: the strongest arches are those whose sweep is a whole semicircle; as the piers of bridges always diminish the bed of a river, in case of inundations, the bed must be sunk or hollowed in proportion to the space taken up by the piers, as the waters gain in depth what they lose in breadth, which otherwise conduce to wash away the foundation and endanger the piers: to prevent this, they sometimes diminish the current, either by lengthening its course, or by making it more winding; or by stopping the bottom with

rows of planks, stakes, or piles, which break the current. Bridge.

Among the Romans, the building and repairing of bridges was first committed to the pontifices or priests; then to the censors, or curators of the roads; lastly, the emperors took the care of bridges into their own hands. Thus Antoninus Pius built the Pons Janiculis of marble; Gordian restored the Pons Cestius; and Adrian built a new one denominated from him. In the middle-age, bridge-building was reckoned among the acts of religion; and a regular order of Hospitaliers was founded by St Benezet, towards the end of the 12th century, under the denomination of *pontifices*, or bridge-builders, whose office it was to be assistant to travellers, by making bridges, settling ferries, and receiving strangers in hospitals, or houses built on the banks of rivers. We read of one hospital of this kind at Avignon, where the hospitallers dwelt under the direction of their first superior St Benezet. The Jesuit Raynaldus has a treatise express on St John the bridge-builder.

Among the bridges of antiquity, that built by Trajan over the Danube is allowed to be the most magnificent.

Among modern bridges, that of Westminster, built over the river Thames, may be accounted one of the finest in the world: it is 44 feet wide, a commodious foot-way being allowed for passengers, on each side, of about seven feet broad, raised above the road allowed for carriages, and paved with broad moor-stones, while the space left between them is sufficient to admit three carriages and two horses to go a-breast, without any danger. Its extent from wharf to wharf is 1220 or 1223 feet, being full 300 feet longer than London-bridge. The free water-way under the arches of this bridge is 870 feet, being four times as much as the free water-way left between the sterlings of London-bridge: this disposition, together with the gentleness of the stream, are the chief reasons why no sensible fall of water can ever stop, or in the least endanger, the smallest boats in their passage through the arches.

It consists of 13 large and 2 small arches, together with 14 intermediate piers.

Each pier terminates with a salient right angle against either stream: the two middle piers are each 17 feet in thickness at the springing of the arches, and contain 3000 cubic feet, or near 200 tons, of solid stone; and the others decrease in width equally on each side by one foot.

All the arches of this bridge are semicircular; they all spring from about two feet above low-water mark; the middle arch is 76 feet wide, and the others decrease in breadth equally on each side by 4 feet.

This bridge is built of the best materials; and the size and disposition of these materials are such, that there is no false bearing, or so much as a false joint in the whole structure; besides that it is built in a neat and elegant taste, and with such simplicity and grandeur, that, whether viewed from the water, or by the passengers who walk over it, it fills the mind with an agreeable surprize. The semioctangular towers which form the recesses of the foot-way, the manner of placing the lamps, and the height of the balustrade, are at once the most beautiful, and, in every other respect, the best contrived.

London-

Bridge.

London-bridge consists of 20 locks or arches, 19 of which are open, and one filled up or obscured. It is 900 feet long, 60 high, and 74 broad, with almost 20 feet aperture in each arch. It is supported by 18 piers, from 25 to 34 feet thick; so that the greatest water-way when the tide is above the sterlings is 450 feet, scarce half the width of the river; and below the sterlings, the water-way is reduced to 194 feet. Thus a river 900 feet wide is here forced through a channel of 194 feet. London-bridge was first built of timber, some time before the year 994, by a college of priests, to whom the profits of the ferry of St Mary Overy's had descended; it was repaired, or rather new built of timber, in 1163. The stone bridge was begun by king Henry in 1176, and finished by king John in 1209. The architect was Peter of Colechurch, a priest. For the keeping it in repair, a large house is allotted, with a great number of offices, and a vast revenue in land, &c. The chief officers are two bridge-masters, chosen yearly out of the body of the livery. The defects of this bridge are the narrowness and irregularity of the arches, and the largeness of the piers, which, together with the sterlings, turn the current of the Thames into many frightful cataracts, which must obstruct and endanger the navigation through the bridge. The sterlings have been added, to hinder the piers from being undermined by the rotting of the piles on which they are built: for by means of these sterlings the piles are kept constantly wet; and thus the timber is kept from decaying, which always happens when it is suffered to be alternately wet and dry.

Blackfriars bridge, situated near the centre of the city, and built according to a plan drawn by Mr Robert Mylne, is an exceeding light and elegant structure. The arches are only 9 in number; but very large, and of an elliptical form. The centre-arch is 100 feet wide; those on the sides decrease in a regular gradation; and the width of that near the abutment at each end is 70 feet. It has an open balustrade at the top, and a foot way on each side, with room for three carriages abreast in the middle. It has also recesses on the sides for the foot-passengers, each supported by two lofty Ionic columns.

The longest bridge in England is that over the Trent at Burton, built by Bernard abbot of Burton, in the 12th century; it is all of squared free stone, strong and lofty, 1545 feet in length, and consisting of 34 arches. Yet this comes far short of the wooden bridge over the Drave, which according to Dr Brown is at least five miles long.

But the most singular bridge in Europe is that built over the river Tave in Glamorganshire. It consists of one stupendous arch, the diameter of which is 175 feet, the chord 140, the altitude 35, and the abutments 32. This magnificent arch was built by William Edward, a poor country mason, in the year 1756.

The famous bridge of Venice, called the *Rialto*, consists of but a single arch, and that a flat or low one, and passed for a masterpiece of art. It was built in 1591, on the design of Michael Angelo; the span of the arch is 98½ feet, and its height above the water only 23.—Poulet mentions a bridge of a single arch in the city of Munster in Bothnia, much bolder than that of the Ri-

alto at Venice. But these are nothing to a bridge in China, built from one mountain to another, consisting of a single arch 400 cubits long and 500 in height, whence it is called the *flying-bridge*: a figure of it is given in the Philosophical Transactions. Kircher also speaks of a bridge in the same country 360 perches long, supported by 300 pillars.

Rusben BRIDGE, *Pont de jonc*, is made of large sheaves of rushes growing in marshy grounds, which they cover with boards or planks; they serve for crossing ground that is boggy, miry, or rotten. The Romans had also a sort of subitaneous bridges made by the soldiers, of boats, or sometimes of casks, leathern bottles, or bags, or even of bullocks bladders blown up and fastened together, called *ascogafri*. M. Couplet gives the figure of a portable bridge 200 feet long, easily taken asunder and put together again, and which 40 men may carry. Frezier speaks of a wonderful kind of bridge at Apurima in Lima, made of ropes, formed of the bark of a tree.

Pendent or Hanging BRIDGES, called also *Philosophical Bridges*, are those not supported either by posts or pillars, but hung at large in the air, only supported at the two ends or butments. Instances of such bridges are given by Palladio and others. Dr Wallis gives the design of a timber-bridge 70 feet long, without any pillars, which may be useful in some places where pillars cannot be conveniently erected. Dr Plot assures us, that there was formerly a large bridge over the castle-ditch at Tilbury in Staffordshire, made of pieces of timber, none much above a yard long, and yet not supported underneath either with pillars or archwork, or any sort of prop whatever.

Draw-BRIDGE, one that is fastened with hinges at one end only, so that the other may be drawn up; in which case, the bridge stands upright, to hinder the passage of a ditch or moat.

Flying-BRIDGE or *Pons duëtorius*, an appellation given to a bridge made of pontoons, leather boats, hollow beams, casks, or the like, laid on a river, and covered with planks, for the passage of an army.

Flying-BRIDGE (*pont volant*) more particularly denotes a bridge composed of one or two boats joined together by a sort of flooring, and surrounded with a rail or balustrade; having also one or more masts, to which is fastened a cable, supported, at proper distances, by boats, and extended to an anchor, to which the other end is fastened, in the middle of the water: by which contrivance, the bridge becomes moveable, like a pendulum from one side of the river to the other, without any other help than the rudder.—Such bridges sometimes also consist of two stories, for the quicker passage of a great number of men, or that both infantry and cavalry may pass at the same time.

In Plate CVIII. is represented a flying-bridge of this kind. Fig. 2. is a perspective view of the course of a river and its two banks. *a, b, c, d*, Two long boats or batteaux, which support the flying-bridge. *G, H, K, L*, two masts joined at their tops by two transverse pieces, or beams, and a central arch, and supported in a vertical position by two pair of shrouds and two chains *LN, HR*. *M*, a horse, or cross piece, over which the rope or cable *M, F, z, f*, that rides or holds the bridge against the current, passes. *E*, a roll or windlass round

4 A 2

which

Bridge.

Bridge.

which the rope M, F, e, f, is wound. a, b, The rudders. AB, and CD, two portions of bridges of boats fastened to the bank on each side, and between which the flying-bridge moves in passing from one side of the river to the other. e, f, Chains supported by two punts, or small flat-bottomed boats: there are five or six of these punts at about 40 fathoms from one another. The first, or farthest from the bridge, is moored with anchors in the middle of the bed of the river.

Fig. 3. Is a plan of the same bridge. a, b, c, d, The two boats that support it. K and G, the two masts. KFG, the transverse piece or beam over which the cable passes. E, the roll, or windlass, round which the rope or cable is wound. a, b, The rudders. O, a boat. e, One of the punts, or small flat-bottomed boats that support the chain. N, N, pumps for extracting the water out of the boats. P, P, capstans.

Fig. 4. Lateral elevation of the bridge. a, c, One of the boats. b, The rudder. E, The roll, or windlass. M, The horse, or cross-piece. GH, One of the masts. E, M, H, F, The cable. In this view the balustrade running along the side of the bridge is plainly exhibited.

Fig. 5. Elevation of the hinder or stern part of the bridge. a, b, The two boats. GH, KL, The two masts. HL, The upper transverse beam. p, q, The lower transverse beam, or that over which the cable passes, and on which it slides from one mast to the other; this beam is therefore always kept well greased. p, k, q, g, Shrouds extending from the sides of the bridge to the tops of the masts. M, The horse or cross-piece over which the cable passes to the roll or windless E.

BRIDGES of Boats are either made of copper or wooden boats, fastened with stakes or anchors, and laid over with planks. One of the most notable exploits of Julius Cæsar was the expeditious making a bridge of boats over the Rhine. Modern armies carry copper or tin boats, called *pontoons*, to be in readiness for making bridges; several of these being joined side by side till they reach across the river, and planks laid over them, make a plane for the men to march on. There are fine bridges of boats at Beaucaire and Rouen, which rise and fall with the water; and that at Seville is said to exceed them both. The bridge of boats at Rouen, built in lieu of the stately stone-bridge erected there by the Romans, is represented by a modern writer as the wonder of the present age. It always floats, and rises and falls with the tide, or as the land-waters fill the river. It is near 300 yards long, and is paved with stone, just as the streets are; carriages with the greatest burdens go over it with ease, and men and horses with safety, though there are no rails on either hand. The boats are very firm, and well moored with strong chains, and the whole well looked after and constantly repaired, though now very old.

BRIDGE of Communication, is that made over a river, by which two armies, or forts, which are separated by that river, have a free communication with one another.

Floating-BRIDGE, is ordinarily made of two small bridges, laid one over the other, in such manner as that the uppermost stretches and runs out, by the help of certain cords running through pulleys placed along the sides of the under-bridge, which push it forwards till the end of it joins the place it is designed to be

fixed on. When these two bridges are stretched out to their full length, so that the two middle ends meet, they are not to be above four or five fathoms long; because, if longer, they will break. Their chief use is for surprising out-works, or posts that have but narrow moats. In the memoirs of the royal academy of sciences we find an ingenious contrivance of a floating bridge, which lays itself on the other side of the river.

BRIDGE, Natural, implies a bridge not constructed by art, but the result of some operation of nature.

A most wonderful work of this kind is described by Mr Jefferson in his *State of Virginia*. It is on the ascent of a hill, which seems to have been cloven through its length by some great convulsion. The fissure, just at the bridge, is, by some admeasurements, 270 feet deep, by others only 205. It is about 45 feet wide at the bottom, and 90 feet at the top; this of course determines the length of the bridge, and its height from the water. Its breadth in the middle is about 60 feet, but more at the ends, and the thickness of the mass at the summit of the arch about 40 feet. A part of this thickness is constituted by a coat of earth, which gives growth to many large trees. The residue, with the hill on both sides, is one solid rock of lime-stone. The arch approaches the semi-elliptical form; but the larger axis of the ellipsis, which would be the cord of the arch, is many times longer than the transverse. Though the sides of this bridge are provided in some parts with a parapet of fixed rocks, yet few men have a resolution to walk to them and look over into the abyfs. You involuntarily fall on your hands and feet, creep to the parapet, and peep over it. Looking down from this height about a minute, gave our author a violent headach. If the view from the top be painful and intolerable, that from below is delightful in an equal extreme. It is impossible for the emotions arising from the sublime to be felt beyond what they are here: so beautiful an arch, so elevated, so light, and springing as it were up to heaven, the rapture of the spectator is really indescribable! The fissure continuing narrow, deep, and straight for a considerable distance above and below the bridge, opens a short but very pleasing view of the North-mountain on one side and Blue-ridge on the other, at the distance each of them of about five miles. This bridge is in the county of Rockbridge, to which it has given name, and affords a public and commodious passage over a valley, which cannot be crossed elsewhere for a considerable distance. The stream passing under it is called *Cedar-creek*. It is a water of James River, and sufficient in the driest seasons to turn a grist-mill, though its fountain is not more than two miles above.

Don Ulloa mentions a break, similar to this, in the province of Angaraez, in South America. It is from 16 to 22 feet wide, 111 feet deep, and of 1.3 miles continuance, English measure. Its breadth at top is not sensibly greater than at bottom. Don Ulloa inclines to the opinion, that this channel has been effected by the wearing of the water which runs through it, rather than that the mountain should have been broken open by any convulsion of nature. But if it had been worn by the running of water, would not the rocks which form the sides have been worn plane? or if, meeting in some parts with veins of harder stone,

Bridge.



Fig. 9. *Balistes Monoceros*
or Unicorn Fish



Fig. 10. *Balistes Vetus*
or Old Wife



Fig. 5.



Fig. 4.

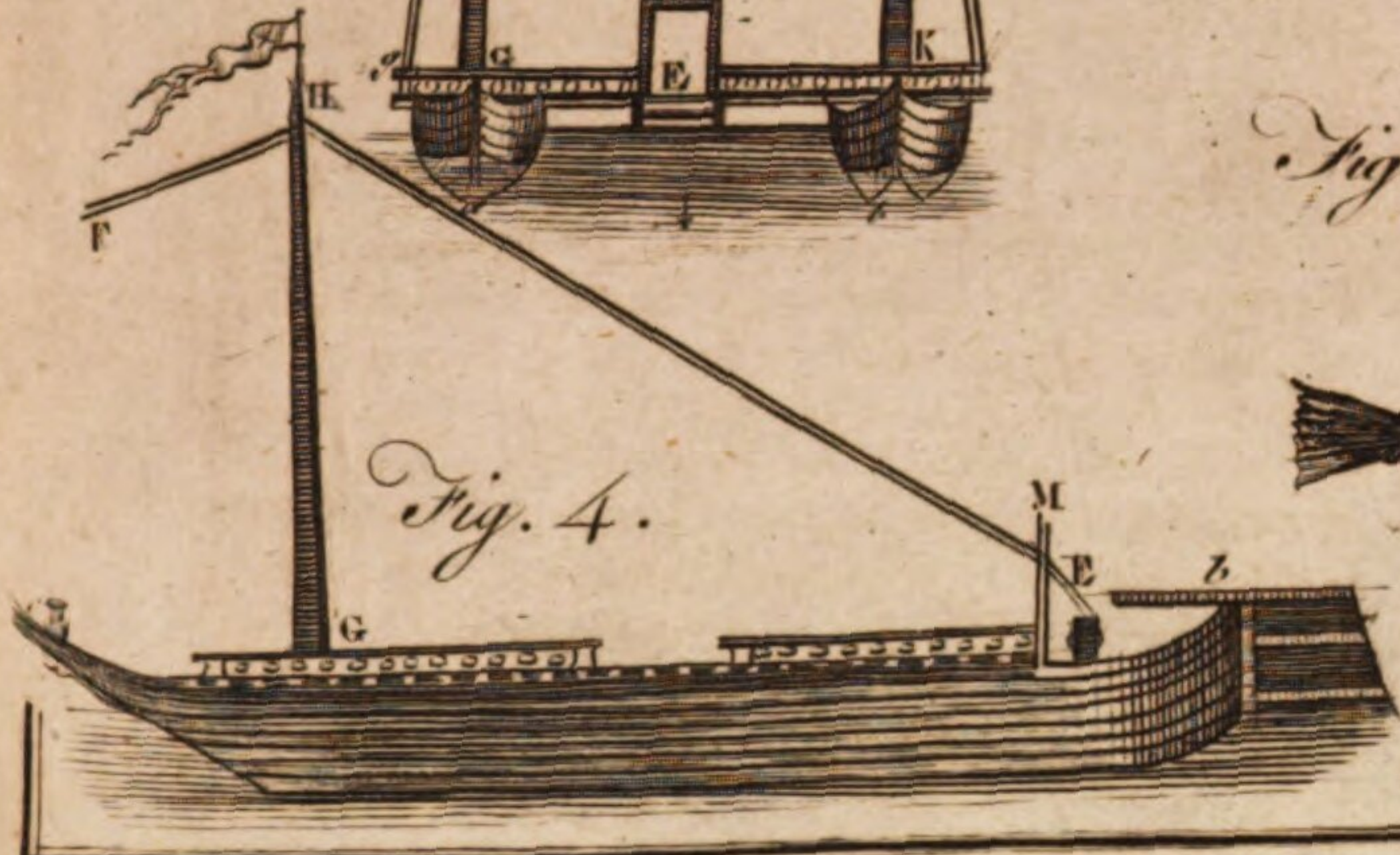


Fig. 2.

Flying Bridge.

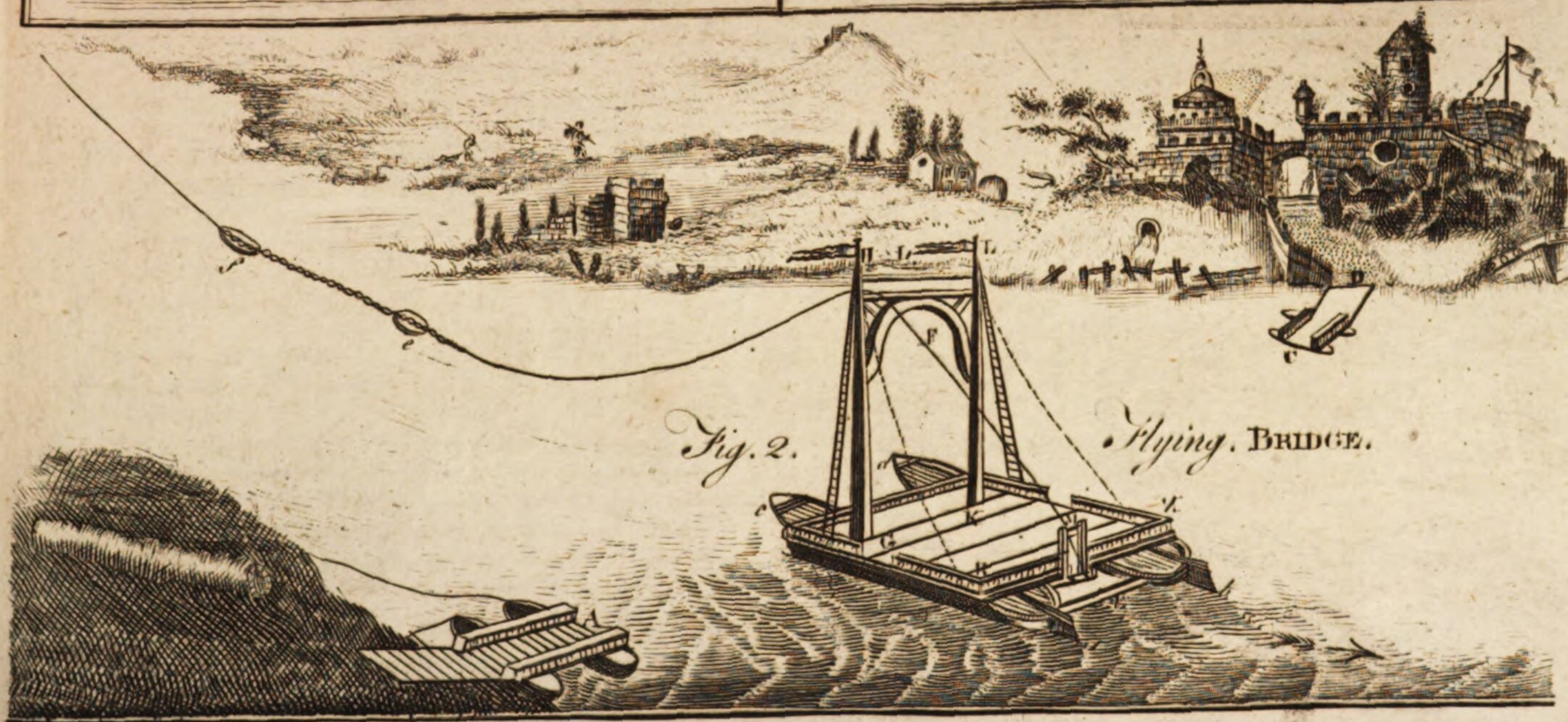


Fig. 6.



Fig. 7.

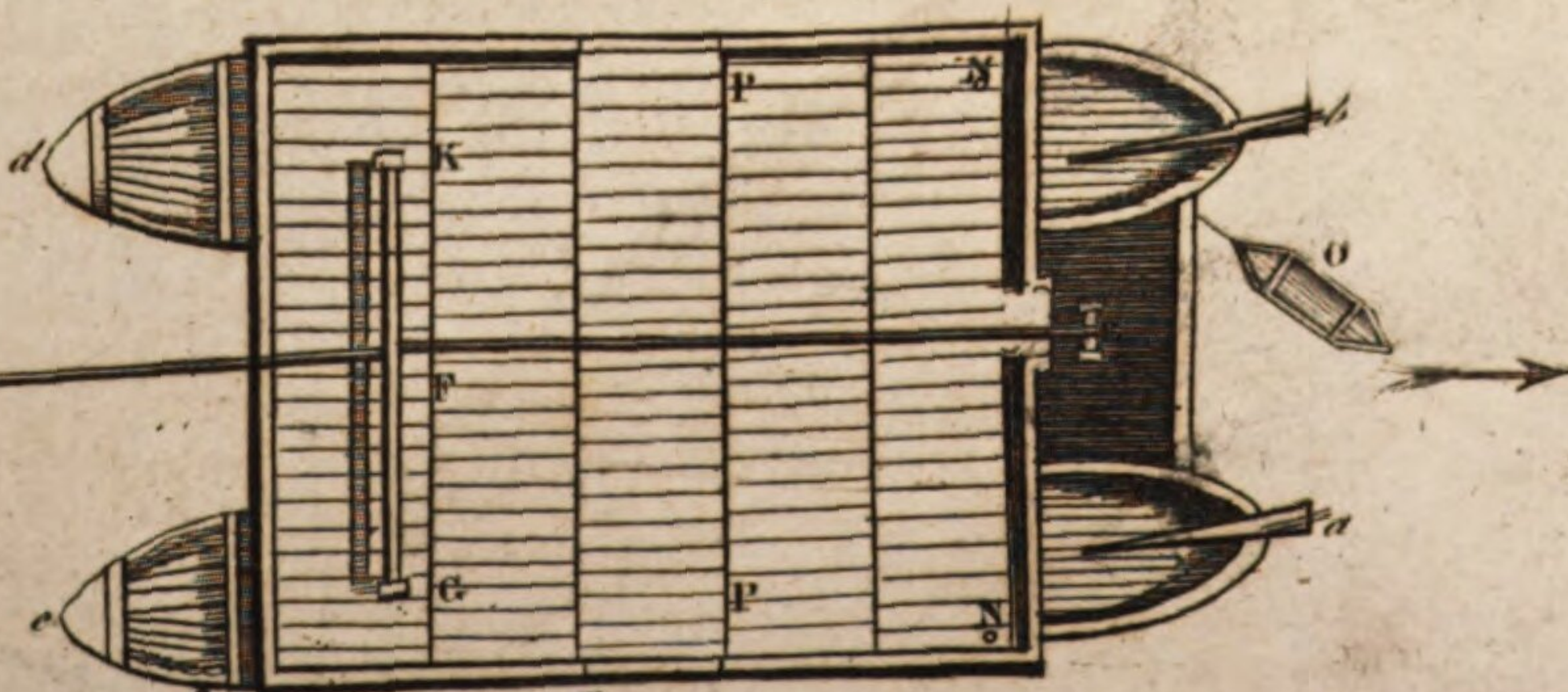


Fig. 3.

Bridge.

the water had left prominences on the one side, would not the same cause have sometimes, or perhaps generally, occasioned prominences on the other side also? Yet Don Ulloa tells us, that on the other side there are always corresponding cavities, and that these tally with the prominences so perfectly, that, were the two sides to come together, they would fit in all their indentures, without leaving any void. In fact, this does not resemble the effect of running water, but looks rather as if the two sides had parted asunder. The sides of the break, over which is the Natural bridge of Virginia, consisting of a veiny rock which yields to time, the correspondence between the salient and re-entering inequalities, if it existed at all, has now disappeared. This break has the advantage of the one described by Don Ulloa in its finest circumstance; no portion in that instance having held together, during the separation of the other parts, so as to form a bridge over the abyss.

BRIDGE, in gunnery, the two pieces of timber which go between the two transoms of a gun-carriage, on which the bed rests.

BRIDGE, in music, a term for that part of a stringed instrument over which the strings are stretched. The bridge of a violin is about one inch and a quarter high, and near an inch and a half long.

BRIDGE-TOWN, the capital of the island of Barbadoes, situated in W. Long. 61°. N. Lat. 13°. It stands in the inmost part of Carlisle bay. This originally was a most unwholesome situation, and was chosen entirely for its convenience for trade; but is now deemed to be as healthy as any place in the island. The town itself would make a figure in any European kingdom. It is said to contain 1500 houses, and some contend that it is the finest the British possess in America. The houses in general are well built and finished, and their rents as high as such houses would let for in London. The wharfs and quays are well defended from the sea, and very convenient. The harbour is secured from the north-east wind, which is the constant trade-wind there; and Carlisle-bay is capable of containing 500 ships, and is formed by Needham and Pelican points. But what renders Bridge-town the finest and most desirable town in the West Indies, is its security against any attacks from foreign enemies. It is defended on the westward by James fort, which mounts 18 guns. Near this is Willoughby's fort, which is built upon a tongue of land running into the sea, and mounts 12 guns. Needham's fort has three batteries, and is mounted with 20 guns; and St Anne's fort, which is the strongest in the island, stands more within land. In short, according to Mr Douglas, there is all along the lee-shore a breast-work and trench, in which, at proper places, were 29 forts and batteries, having 308 cannon mounted, while the windward shore is secured by high rocks, steep cliffs, and foul ground. Such was the state of the fortifications in 1717; but since that time they have been much strengthened. Bridge town is destitute of few elegancies or conveniences of life that any city of Europe can afford. The church of St Michael exceeds many English cathedrals in beauty, largeness, and conveniency; and has a fine organ, bells, and clock. Here also is a free-school for the instruction of poor boys, an hospital, and a college. The latter was erected by the society for propagating the Christian religion, in pursuance of

the will of Colonel Christopher Codrington, who left about L. 2000 a-year for its endowment, for maintaining professors and scholars to study and practise divinity, surgery, and physic. See CODRINGTON.

BRIDGENORTH, a town of Shropshire in England, seated on the river Severn, which divides it into two parts; but they are united by a handsome stone bridge, and these are called the *upper* and the *lower town*. It is said to have been built by Ethelfleda, widow of Etheldred king of the Mercians, about the year 675. Robert de Belizma, son of Robert de Montgomery, built the castle, and maintained it against king Henry I. by which means it was forfeited to the crown, and remained so till the reign of Richard III. who gave it to John Sutton lord Dudley. This town has undergone several sieges; and in the civil war it suffered very much, many fine buildings, and the whole town, being almost destroyed by fire, when Sir Lewis Kirke defended the citadel for king Charles. There are now no other remains of the castle than a small part of the towers, and a place yet called the *castle*, within the walls of the old one; within which stands one of the churches, dedicated to St Mary Magdalen, which was made a free chapel, and exempted from episcopal jurisdiction. The other church is at the north end of the town, on the highest part of the hill, near to whose church-yard stood a college, which was destroyed by fire in the civil wars, together with the church just mentioned; which has been since rebuilt by the inhabitants. On the west bank of the river are the remains of an ancient and magnificent convent, under which was several remarkable vaults and caverns running to a great length. Part of the cow-gate street is a rock, rising perpendicularly, in which are several houses and tenements that make a very agreeable though grotesque appearance. In many other places there are also caves and dwellings for families, in the rocks; and indeed the whole town has an appearance surprisingly singular. This town sends two members to parliament. W. Long. 2. 30. N. Lat. 52. 40.

BRIDGEWATER, a town of Somersetshire in England, seated on the river Parret, over which there is a stone-bridge, near which ships of 100 tons burden may ride with ease. It is a large well frequented place, with the title of a duchy, and sends two members to parliament. There are in it several large inns, and the market is well supplied with provisions. W. Long. 3. 0. N. Lat. 51. 15.

BRIDLE, in the manege, a contrivance made of straps or thongs of leather and pieces of iron, in order to keep a horse in subjection and obedience.

The several parts of a bridle are the bit or snaffle; the head-stall, or leathers from the top of the head to the rings of the bit; the fillet, over the fore-head and under the fore-top; the throat-band, which buttons from the head-band under the throat; the reins, or long thongs of leather that come from the rings of the bit, and being cast over the horse's head, the rider holds them in his hand; the nose-band, going through loops at the back of the head-stall, and buckled under the cheeks; the trench; the cavesein; the martingal; and the chaff-halter.

Pliny assures us that one Pelethronius first invented the bridle and saddle; though Virgil ascribes the invention to the Lapithæ, to whom he gives the epithet:

Bridge
north
||
Bridle.

Bridon
Brieg.

thet *Pelethronii*, from a mountain in Thessaly named *Pelethronium*, where horses were first begun to be broken. The first horsemen, not being acquainted with the art of governing horses with bridles, managed them only with a rope or a switch, and the accent of the voice. This was the practice of the Numidians, Getulians, Libyans, and Massilians. The Roman youth also learned the art of fighting without bridles, which was an exercise or lesson in the manege; and hence it is, that on the Trajan column, soldiers are represented riding at full speed without any bridles on.

Scolding-BRIDGE. See BRANK.

BRIDON, or SNAFFLE, after the English fashion, is a very slender bit-mouth without any branches. The English make much use of them, and scarcely use any true bridles except in the service of war. The French call them *bridons*, by way of distinction from bridles.

BRIDLINGTON, a sea-port town in the east riding of Yorkshire in England. It is seated on a creek of the sea near Flamborough-head, having a commodious quay for ships to take in their lading. It has a safe harbour, and is a place of good trade. It is more generally known by the name of *Burlington*, as it gave title to an earl of that name, though the earldom is now extinct. E. Long. 0. 10. N. Lat. 54. 15.

BRIDPORT, a town of Dorsetshire in England. It has a low dirty situation between two rivers, which, at a little distance, joining a small stream, formerly made a convenient harbour; but is now quite choked up with sand. It sends two members to parliament, who are chosen by the inhabitants who are housekeepers. It is noted for making of ropes and cables for shipping; whence arises a proverb of a man that is hanged, that he is *stabbed with a Bridport dagger*. W. Long. 3. 0. N. Lat. 50. 40.

BRIEF, in law, an abridgment of the client's case, made out for the instruction of council on a trial at law; wherein the case of the plaintiff, &c. is to be briefly but fully stated: the proofs must be placed in due order, and proper answers made to whatever may be objected to the client's cause by the opposite side; and herein great care is requisite, that nothing be emitted, to endanger the cause.

BRIEF, in Scots law, a writ issued from the chancery, directed to any judge-ordinary, commanding and authorising that judge to call a jury to inquire into the case mentioned in the brief, and upon their verdict to pronounce sentence.

Apostolical BRIEFS, letters which the pope dispatches to princes, or other magistrates, relating to any public affair.—These briefs are distinguished from bulls, in regard the latter are more ample, and always written on parchment, and sealed with lead or green wax; whereas briefs are very concise, written on paper, sealed with red wax, and with the seal of a fisherman, or St Peter in a boat.

BRIEG, a town of Silesia in Germany, situated in E. Long. 17. 35. N. Lat. 50. 40. It might have passed for a handsome place before the last siege; the castle, the college, and the arsenal, being very great ornaments, and most of the houses very well built. But the Prussians, who besieged it in 1741, threw 2172 bombs into it, and 4714 cannon bullets, which reduced a great part of the town to ashes, and quite ruined a

wing of the castle. It was obliged to surrender, after sustaining seven days continual fire. The Prussians, to whom this place was ceded by the peace, have augmented the fortifications, and built a new suburb.—The town stands upon the Oder; on the other side of which there are plenty of fallow-deer, and large forests of beech and oak trees. They have a yearly fair, at which they sell above 12,000 horned cattle. Since 1728, they have begun to manufacture fine cloth.

BRIEL, a maritime town of the United Provinces, and capital of the island of Vuorn. It was one of the cautionary towns which was delivered into the hands of queen Elizabeth, and garrisoned by the English during her reign and part of the next. The Dutch took it from the Spaniards, in 1572, which was the foundation of their republic. It is seated at the mouth of the river Meuse, in E. Long. 3. 56. N. Lat. 51. 53.

BRIESIA, a palatinate in the duchy of Lithuania, in Poland. The name given to it by some is *Polesia*. It is bounded on the north, by Novogrode and Troki; on the west, by those of Bielsko and Lublin on the south, by that of Chelm and upper Volhonia; and on the east, by the territory of Rziczica. This province is of considerable extent from east to west, and is watered by the rivers Bug and Pripele: it is full of woods and marshes; and there are lakes that yield large quantities of fish, that are salted by the inhabitants, and sent into the neighbouring provinces.

BRIEUX (St), a town of France, in Upper Brittany, with a bishop's see. It is seated in a bottom, surrounded with mountains, which deprive it of a prospect of the sea, though it is not above a mile and a quarter from it, and there forms a small port. The churches, streets, and squares, are tolerably handsome; but the town is without walls and ditches. The church of Michael is in the suburb of the same name, and is the largest in the place. The convent of the Cordeliers is well built, and the garden is spacious. The college, which is very near, is maintained by the town for the instruction of youth. W. Long. 2. 58. N. Lat. 48. 33.

BRIG, or BRIGANTINE, a merchant-ship with two masts. This term is not universally confined to vessels of a particular construction, or which are masted and rigged in a manner different from all others. It is variously applied, by the mariners of different European nations, to a peculiar sort of vessel of their own marine. Amongst British seamen, this vessel is distinguished by having her main-sails set nearly in the plane of her keel; whereas the mainsails of larger ships are hung athwart, or at right angles with the ship's length, and fastened to a yard which hangs parallel to the deck: but in a brig, the foremost edge of the mainsail is fastened in different places to hoops which encircle the main-mast, and slide up and down it as the sail is hoisted or lowered: it is extended by a gaff above and a boom below.

BRIGADE, in the military art, a party or division of a body of soldiers, whether horse or foot, under the command of a brigadier.—An army is divided into brigades of horse and brigades of foot: a brigade of horse is a body of eight or ten squadrons; a brigade of foot consists of four, five, or six battalions. The eldest brigade has the right of the first line, and the second the right of the second; the two

Briel.
Brigade.

next

Brigade next take the left of the two lines, and the youngest stand in the centre.

Briggs.

BRIGADE-Major, is an officer appointed by the brigadier, to assist him in the management and ordering of his brigade.

BRIGADIER, is the general officer who has the command of a brigade. The eldest colonels are generally advanced to this post. He that is upon duty is brigadier of the day. They march at the head of their own brigades, and are allowed a serjeant and ten men of their own brigade for their guard.—But the rank of brigadier-general in the British service is now abolished.

BRIGADIERS, or *Sub brigadiers*, are posts in the horse-guards.

BRIGANDINE, a coat of mail, a kind of ancient defensive armour, consisting of thin jointed scales of plate, pliant and easy to the body.

BRIGANTES (Tacitus), a people of Britain, reaching from sea to sea, the whole breadth of the island (Ptolemy). Now Yorkshire, Lancashire, Durham, Westmoreland, and Cumberland (Camden). Also a people of Ireland, of uncertain position.

BRIGANTIA, or **BRIGANTIUM** (anc. geog.), a town of Vindelicia; now *Bregentz*, in Tyrol, at the east end of the lake of Constance.—Another *Brigantium* in the Alpes Cottiae; which last is probably *Briançon*, a town on the borders of Dauphiny.

BRIGANTINE. See **BRIG**.

BRIGANTINUS LACUS (anc. geog.), a lake of Rhætia, or Vindelicia, which Tacitus includes in Rhætia. Ammian calls the lake *Brigantia*. It took its name either from the Brigantii, the people inhabiting on it, or from the adjoining town. Now the lake of *Constance* or *Bodensee*.

BRIGANTINUS Portus (anc. geog.), a port of the Iberian Spain; so called from Flavium Brigantium. Now *El Puerto de la Coruña*, commonly the *Groyne*.

BRIGG, by some called *Clamford Bridges*, a town of England, in Lincolnshire, seated on the river *Ankam*. W. Long. 0. 20. N. Lat. 53. 40.

BRIGGS (Henry), one of the greatest mathematicians in the 16th century, was born at Warley Wood in the parish of Halifax in Yorkshire, in 1556. In 1592, he was made examiner and lecturer in mathematics, and soon after reader of the physic lecture founded by Dr Linacer. When Gresham college in London was established, he was chosen the first professor of Geometry there, about the beginning of March 1596. In 1609, Mr Briggs contracted an intimacy with the learned Mr James Usher afterwards archbishop of Armagh, which continued many years by letters, two of which, written by our author, are yet extant. In one of these letters, dated in August 1610, he tells his friend he was engaged in the subject of eclipses; and in the other, dated March 10th 1615, he acquaints him with his being wholly employed about the noble invention of logarithms, then lately discovered, in the improvement of which he had afterwards a large share. In 1619, he was made Savilian professor of geometry at Oxford; and resigned his professorship of Gresham college on the 25th of July 1620. Soon after his going to Oxford, he was incorporated master of arts in that university; where he continued till his death, which happened on the 26th of January 1630. Dr Smith

gives him the character of a man of great probity; a contemner of riches, and contented with his own station; preferring a studious retirement to all the splendid circumstances of life. He wrote, 1. *Logarithmorum chilias prima*. 2. *Arithmetica logarithmica*. 3. *Trigonometria Britannica*. 4. A small tract on the north-west passage; and some other works.

BRIGGS (William), an eminent physician in the latter end of the 17th century, was the son of Augustin Briggs, Esq; four times member for the city of Norwich, where our author was born. He studied at the university of Cambridge; and his genius leading him to the study of physic, he travelled into France, where he attended the lectures of the famous anatomist M. Vieussens at Montpellier. After his return, he published his *Ophthalmographia* in 1676. The year following he was created doctor of medicine at Cambridge, and soon after was made fellow of the college of physicians at London. In 1682, he quitted his fellowship to his brother; and the same year, his *Theory of Vision* was published by Hooke. The ensuing year he sent to the royal society a continuation of that discourse, which was published in their Transactions; and the same year, he was by King Charles II. appointed physician to St Thomas's hospital. In 1684, he communicated to the royal society two remarkable cases relating to vision, which were likewise printed in their Transactions; and in 1685 he published a Latin version of his *Theory of Vision*, at the desire of Mr Newton, afterwards Sir Isaac, professor of mathematics at Cambridge, with a recommendatory epistle from him prefixed to it. He was afterwards made physician in ordinary to King William, and continued in great esteem for his skill in his profession till he died September 4th 1704.

BRIGHTHELMSTONE, a sea-port town of Sussex in England. It is a pretty large and populous town, though ill built, and has a pretty good harbour. W. Long. 0. 10. N. Lat. 50. 50. It was at this place King Charles II. embarked for France 1651, after the battle of Worcester. It has lately been considerably extended and embellished, in consequence of its having become a place of great resort for sea-bathing.

BRIGITTINS, or **BRIDGETINS**, more properly *Brigittins*, a religious order, denominated from their founder St Bridget or *Birgit*, a Swedish lady in the 14th century; whom some represent as a queen; but Fabricius, on better grounds, as a princess, the daughter of king Birgenes, legislator of Upland, and famous for her revelations. The Brigittins are sometimes also called the *Order of our Saviour*; it being pretended, that Christ himself dictated the rules and constitutions observed by them to St Bridget. In the main, the rule is that of St Augustin; only with certain additions supposed to have been revealed by Christ, whence they also denominate it the *Rule of our Saviour*.—The first monastery of the Bridgetin order was erected by the foundress about the year 1344, in the diocese of Lincopen; on the model of which all the rest were formed. The constitution of these houses was very singular: though the order was principally intended for nuns, who were to pay a special homage to the holy Virgin, there are also many friars of it, to minister to them spiritual assistance. The number of nuns is fixed at 60 in each monastery, and that of friars to 13.

Briggs

Brigittins.

Brignoles
||
Brim.

answerable to the number of apostles, of whom St Paul made the 13th; besides which there are to be four deacons, to represent the four doctors of the church, St Ambrose, St Augustin, St Gregory, and St Jerome; and eight lay-brothers; making together, says our author, the number of Christ's 72 disciples.—The order being instituted in honour of the Virgin, the direction is committed to an abbess, who is superior not only of the nuns, but also of the friars, who are obliged to obey her. Each house consists of two convents or monasteries, separately inclosed, but having one church in common; the nuns being placed above, and the friars on the ground. The Bridgetins profess great mortification, poverty, and self-denial, as well as devotion; and they are not to possess any thing they can call their own, not so much as an halfpenny; nor even to touch money on any account. This order spread much thro' Sweden, Germany, the Netherlands, &c. In England we read but of one monastery of Brigittins, and this built by Henry V. in 1415, opposite to Richmond, now called *Sion house*; the ancient inhabitants of which, since the dissolution, are settled at Lisbon. The revenues were reckoned at 1495 l. per annum.

BRIGNOLES, a town of France, in Provence, famous for its prunes. It is seated among mountains, in a pleasant country, 275 miles S. S. E. of Paris. E. Long. 6. 15. N. Lat. 43. 24.

BRIHUEGA, a town of Spain, in New Castile, where General Stanhope with the English army were taken prisoners, after they had separated themselves from that commanded by count Straremburg. It is seated at the foot of the mountain Tajuna, 43 miles north-east of Madrid. W. Long. 3. 20. N. Lat. 41. 0.

BRIL (Matthew and Paul), natives of Antwerp, and good painters.—Matthew was born in the year 1550, and studied for the most part at Rome. He was eminent for his performances in history and landscape, in the galleries of the Vatican; where he was employed by Pope Gregory XIII. He died in 1584, being no more than 34 years of age.—Paul was born in 1554; followed his brother Matthew to Rome; painted several things in conjunction with him; and, after his decease, brought himself into credit by his landscapes, but especially by those which he composed in his latter time. The invention of them was more pleasant, the disposition more noble, all the parts more agreeable, and painted with a better gusto than his earlier productions in this way; which was owing to his having studied the manner of Hannibal Carrache, and copied some of Titian's works in the same kind. He was much in favour with Pope Sixtus V.; and for his successor Clement VIII. painted the famous piece, about 68 feet long, wherein the saint of that name is represented cast into the sea with an anchor about his neck. He died at Rome in the year 1626, aged 72.

Pilkington's
Dist.

BRILLIANT, in a general sense, something that has a bright and lucid appearance.

BRILLIANT, in the manege. A brisk, high mettled, stately horse is called *brilliant*, as having a raised neck; a fine motion; and excellent haunches, upon which he rises, though ever so little put on.

BRILLIANTS, a name given to diamonds of the finest cut. See DIAMOND.

BRIM denotes the outmost verge or edge, especially of round things. The brims of vessels are made to project a little over, to hinder liquors, in pouring out,

from running down the side of the vessel. The brimming of vessels was contrived by the ancient potters, in imitation of the supercilium or drip of the cornices of columns: it is done by turning over some of the double matter when the work is on the wheel.

BRIM, in country affairs. A sow is said to *brim*, or to go to *brim*, when she is ready to take the boar.

BRIMSTONE. See SULPHUR.

BRIMSTONE Medals, Figures, &c, may be cast in the following manner: Melt half a pound of brimstone over a gentle fire: with this mix half a pound of fine vermilion; and when you have cleared the top, take it off the fire, stir it well together, and it will dissolve like oil: then cast it into the mould, which should be first anointed with oil. When cool, the figure may be taken out; and in case it should change to a yellowish colour, you need only wipe it over with aquafortis, and it will look like the finest coral†.

BRIN, a strong town of Bohemia, in Moravia. It is pretty large, and well built: the assembly of the states is held alternately there and at Olmutz. The castle of Spilberg is on an eminence, out of the town, and is its principal defence. It was invested by the king of Prussia in 1742, but he was obliged to raise the siege. It is near the river Swart, in E. Long. 7. 8. N. Lat. 49. 8.

BRINDISI, an ancient celebrated town of Italy, in the Terra d'Otranto, and kingdom of Naples, with an archbishop's see. Its walls are still of great extent, but the inhabited houses do not fill above half the enclosure. The streets are crooked and rough; the buildings poor and ruinous; no very remarkable church or edifice. The cathedral, dedicated to St Theodore, is a work of king Roger, but not equal in point of architecture to many churches founded by that monarch, who had a strong passion for building. Little remains of ancient Brundisium, except innumerable broken pillars fixed at the corners of streets to defend the houses from carts; fragments of coarse Mosaic, the floors of former habitations; the column of the lighthouse; a large marble basin, into which the water runs from brazen heads of deer; some inscriptions, ruins of aqueducts, coins, and other small furniture of an antiquary's cabinet. Its castle, built by the emperor Frederick II. to protect the northern branches of the harbour, is large and stately. Charles V. repaired it. The port is double, and the finest in the Adriatic. The outer part is formed by two promontories, which stretch off gradually from each other as they advance into the sea, leaving a very narrow channel at the base of the angle. The island of St Andrew, on which Alphonfus I. built a fortress, lies between the capes, and secures the whole road from the fury of the waves. In this triangular space, large ships may ride at anchor. At the bottom of the bay the hills recede in a semicircular shape, to leave room for the inner haven; which, as it were, clasps the city in its arms, or rather encircles it, in the figure of a stag's head and horns. This form is said to have given rise to the name of *Brundisium*, which, in the old Messapian language, signified *the head of a deer*. In ancient days, the communication between the two havens was marked by lights placed upon columns of the Corinthian order, standing on a rising ground, in a direct line with the channel.

Of these one remains entire upon its pedestal. Its capi-

Brim
||
Brindisi.

† Smith's
Laboratory,

P. 3.

Brindisi. capitals is adorned with figures of Syrens and Tritons, intermingled with the acanthus leaf, and upon it a circular vase, which formerly held the fire. A modern inscription has been cut upon the plinth. Near it is another pedestal of similar dimensions, with one piece of the shaft lying on it. The space between these pillars answered to the entrance of the harbour. "The whole kingdom of Naples (says Mr Swinburne) cannot show a more complete situation for trade than Brindisi. Here goodness of soil, depth of water, safety of anchorage, and a central position, are all united; yet it has neither commerce, husbandry, nor populousness. From the obstructions in the channel, which communicates with the two havens, arises the tribe of evils that afflict and desolate this unhappy town. Julius Cæsar may be said to have begun its ruin, by attempting to block up Pompey's fleet. He drove piles into the neck of land between the two ridges of hills; threw in earth, trees, and ruins of houses; and had nearly accomplished the blockade, when Pompey sailed out and escaped to Greece. In the 15th century, the prince of Taranto sunk some ships in the middle of the passage, to prevent the royalists from entering the port, and thereby provided a resting place for sea-weeds and sand, which soon accumulated, choked up the mouth, and rendered it impracticable for any vessels whatsoever. In 1752 the evil was increased, so as to hinder even the waves from beating through; and all communication was cut off, except in violent easterly winds, or rainy seasons, when an extraordinary quantity of fresh water raises the level. From that period the port became a fetid green lake, full of infection and noxious insects; no fish but eels could live in it, nor any boats ply except canoes made of a single tree. They can hold but one person, and overset with the least irregularity of motion. The low grounds at each end were overflowed and converted into marshes, the vapours of which created every summer a real pestilence; and in the course of very few years, swept off or drove away the largest portion of the inhabitants. From the number of eighteen thousand, they were reduced in 1766 to that of five thousand livid wretches, tormented with agues and malignant fevers. In 1775 above fifteen hundred persons died during the autumn; a woful change of climate! Thirty years ago, the air of Brindisi was esteemed so wholesome and balsamic, that the convents of Naples were wont to send their consumptive friars to this city for the recovery of their health. This state of misery and destruction induced the remaining citizens to apply for relief to Don Carlo Demarco, one of the king's ministers, and a native of Brindisi. In consequence of this application, Don Vito Caravelli was ordered to draw up plans, and fix upon the means of opening the port afresh: Don Andrea Pigonati was last year sent to execute his projects; and, by the help of machines and the labour of the galley-slaves, has succeeded in some measure. The channel has been partly cleared, and has now two fathom of water. It can admit large boats, a great step towards the revival of trade; but what is of more immediate importance, it gives a free passage to the sea, which now rushes in with impetuosity, and runs out again at each tide; so that the water of the inner port is set in motion, and once more rendered wholesome. The canal or gut is to be seven hundred yards long,

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and drawn in a straight line from the column. At present its parapets are defended by piles and fascines; but if the original plan be pursued, stone piers will be erected on both sides. When the canal shall be scooped out to a proper depth, and its piers solidly established, vessels of any burden may once more enter this landlocked port, which affords room for a whole navy. Docks wet and dry may be dug, goods may be shipped at the quay, and convenient watering-places be made with great ease. If merchants should think it a place of rising trade, and worthy of their notice, there is no want of space in the town for any factory whatever. Circulation of cash would give vigour to husbandry, and provisions would soon abound in this market. The sands at the foot of the hills, which form the channel, are to be laid out in beds for muscles and oysters. Some ecclesiastics are raising nurseries of orange and lemon trees; and other citizens intend introducing the cultivation of mulberry-trees, and breeding of silk-worms. The engineer would have done very little for the health of Brindisi, had he only opened a passage, and given a free course to the waters; the marshes at each extremity of the harbour would still have infected the air: he, therefore, at the expence of about a thousand ducats, had the fens filled up with earth, and a dam raised to confine the waters, and prevent their flowing back upon the meadows. The people of Brindisi, who are sensible of the blessings already derived from these operations, who feel a return of health, and see an opening for commerce and opulence, seem ready to acknowledge the obligation. They intend to erect a statue to the king, with inscriptions on the pedestal in honour of the minister and agents. The workmen, in cleaning the channel, have found some medals and seals, and have drawn up many of the piles that were driven in by Cæsar. They are small oaks stripped of their bark, and still as fresh as if they had been cut only a month, though buried above eighteen centuries seven feet under the sand. The soil about the town is light and good. It produces excellent cotton, with which the Brindisians manufacture gloves and stockings.

"It is impossible to determine who were the founders of Brundisium, or when it was first inhabited. The Romans took early possession of a harbour so convenient for their enterprises against the nations dwelling beyond the Adriatic. In the year of Rome 509, they sent a colony hither. Pompey took refuge here; but finding his post untenable, made a precipitate retreat to Greece. In this city Octavianus first assumed the name of *Cæsar*, and here he concluded one of his short-lived peaces with Antony. Brundisium had been already celebrated for giving birth to the tragic poet Pacuvius, and about this time became remarkable for the death of Virgil. The barbarians, who ravaged every corner of Italy, did not spare so rich a town; and, in 836, the Saracens gave a finishing blow to its fortunes. The Greek emperors, sensible of the necessity of having such a port as this in Italy, would have restored it to its ancient strength and splendor, had the Normans allowed them time and leisure. The Greeks struggled manfully to keep their ground; but, after many varieties of success, were finally driven out of Brindisi by William I. The frenzy for expeditions to Palestine, though it drained other kingdoms of their wealth

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wealth and subjects, contributed powerfully to the re-establishment of this city, one of the ports where pilgrims and warriors took shipping. It also benefited by the residence of the emperor Frederick, whose frequent armaments for the Holy Land required his presence at this place of rendezvous. The loss of Jerusalem, the fall of the Grecian empire, and the ruin of all the Levant trade after the Turks had conquered the East, reduced Brindisi to a state of inactivity and desolation, from which it has never been able to emerge." E. Long. 18. 5. N. Lat. 40. 52.

BRINLEY (James), a most uncommon genius for mechanical inventions, and particularly excellent in planning and conducting inland navigations, was born, 1716, at Tunsted in Derbyshire. Through the mismanagement of his father (for there was some little property in his house) his education was totally neglected; and, at seventeen, he bound himself apprentice to a mill-wright, near Macclesfield, in Cheshire. He served his apprenticeship; and, afterwards, setting up for himself, advanced the mill-wright business, by inventions and contrivances of his own, to a degree of perfection which it had not attained before. His fame, as a most ingenious mechanic, spreading widely, his genius was no longer confined to the business of his profession: for, in 1752, he erected a very extraordinary water-engine at Clifton, in Lancashire, for the purpose of draining coal-mines; and, 1755, was employed to execute the larger wheels for a new silk mill, at Congleton, in Cheshire. The potteries of Staffordshire were also, about this time, indebted to him for several valuable additions in the mills used by them for grinding flint-stones. In 1756, he undertook to erect a steam-engine near Newcastle under Line upon a new plan; and it is believed that he would have brought this engine to a great degree of perfection, if some interested engineers had not opposed him.

His attention, however, was soon afterwards called off to another object, which, in its consequences, hath proved of high importance to trade and commerce; namely, the projecting and executing "Inland navigations." By these navigations the expence of carriage is lessened; a communication is opened from one part of the kingdom to another, and from each of these parts to the sea; and hence products and manufactures are afforded at a moderate price. The duke of Bridgewater hath, at Worsley, about seven miles from Manchester, a large estate abounding with coal, which had hitherto lain useless, because the expence of land-carriage was too great to find a market for consumption. The duke, wishing to work these mines, perceived the necessity of a canal from Worsley to Manchester; upon which occasion Brindley, now become famous, was consulted; and declaring the scheme practicable, an act for this purpose was obtained in 1758 and 1759. It being, however, afterwards discovered, that the navigation would be more beneficial, if carried over the river Irwell to Manchester, another act was obtained to vary the course of the canal agreeably to the new plan, and likewise to extend a side-branch to Longford-bridge in Stretford. Brinley, in the mean time, had begun these great works, being the first of the kind ever attempted in England, with navigable subterraneous tunnels and elevated aqueducts; and as, in order to preserve the level of the water, it should be free from

the usual obstructions of locks, he carried the canal over rivers, and many large and deep valleys. When it was completed as far as Barton, where the Irwell is navigable for large vessels, he proposed to carry it over that river, by an aqueduct of thirty-nine feet above the surface of the water; and though this project was treated as wild and chimerical, yet, supported by his noble patron, he began his work in Sept. 1760, and the first boat sailed over it in July 1761. The duke afterwards extended his ideas to Liverpool; and obtained, in 1762, an act for branching his canal to the tideway in the Mersey: this part of the canal is carried over the rivers Mersey and Bolland, and over many wide and deep valleys.

The success of the duke of Bridgewater's undertakings encouraged a number of gentlemen and manufacturers in Staffordshire, to revive the idea of a canal-navigation through that country; and Brinley was, therefore, engaged to make a survey from the Trent to the Mersey. In 1766, this canal was begun, and conducted under Brinley's direction as long as he lived; but finished after his death by his brother-in-law Mr Henshall, of whom he had a great opinion, in May 1777. The proprietors called it, "the canal from the Trent to the Mersey;" but the engineer, more emphatically, "the Grand Trunk Navigation," on account of the numerous branches, which, as he justly supposed, would be extended every way from it. It is 93 miles in length; and, besides a large number of bridges over it, has 76 locks and five tunnels. The most remarkable of the tunnels is the subterraneous passage of Harecastle, being 2880 yards in length, and more than 70 yards below the surface of the earth. The scheme of this inland-navigation had employed the thoughts of the ingenious part of the kingdom for upwards of 20 years before; and some surveys had been made: but Harecastle hill, through which the tunnel is constructed, could neither be avoided nor overcome by any expedient the most able engineers could devise. It was Brinley alone who surmounted this and other the like difficulties, arising from the variety of strata and quicksands, as no one but himself would have attempted to conquer.

Brinley was engaged in many other similar undertakings; for a fuller account of which, not being consistent with our plan, we refer the reader to the "Biographia Britannica;" or rather to a curious and valuable pamphlet, published some years since, and intitled, "The History of Inland-Navigations, particularly that of the Duke of Bridgewater." He died at Turnhurst in Staffordshire, Sept. 27th, 1772, in his 56th year: somewhat immaturally, as it should seem; but he is supposed to have shortened his days by too intense application, and to have brought on a hectic fever, which continued on him for some years before it consumed him. For he never indulged and relaxed himself in the common diversions of life, as not having the least relish for them; and, though once prevailed on to see a play in London, yet he declared that he would on no account be present at another; because it so disturbed his ideas for several days after, as to render him unfit for business. When any extraordinary difficulty occurred to him in the execution of his works, he generally retired to bed; and has been known to lie there one, two, or three days, till he has surmounted it. He would

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Brine. would then get up, and execute his design without any drawing or model: for he had a prodigious memory, and carried every thing in his head.

As his station in life was low, and his education totally neglected, so his exterior accomplishments were suitable to them. He could indeed read and write, but both very indifferently; and he was perhaps, in his way, as *abnormis sapiens*—"of mother-wit, and wise without the schools"—as any man that ever lived. "He is as plain a looking man as one of the boors in the Peake, or one of his own carters: but when he speaks, all ears listen; and every mind is filled with wonder, at the things he pronounces to be practicable." The same author gives us also no ungracious idea of his moral make: "being great in himself, he harbours no contracted notions, no jealousy of rivals: he conceals not his methods of proceeding, nor asks patents to secure the sole use of the machines, which he invents and exposes to public view. Sensible that he must one day cease to be, he selects men of genius, teaches them the power of mechanics, and employs them on carrying on the various undertakings in which he is engaged. It is not to the duke of Bridgewater only that his services are confined: he is of public utility, and employs his talents in rectifying the mistakes of despairing workmen, &c. His powers shine most in the midst of difficulties; when rivers and mountains seem to thwart his designs, then appears his vast capacity, by which he makes them subservient to his will."

BRINE, or PICKLE; water replete with saline particles.

Brine taken out of brine-pits, or brine-pans, used by some for curing or pickling of fish, without boiling the same into salt; and rock salt, without refining it into white-salt; are prohibited by 1 Ann. cap. 21.

Brine is either native, as the sea-water, which by coction turns to salt; or factitious, formed by dissolving salt in water. In the salt-works at Upwick in Worcestershire, there are found, at the same time, and in the same pit, three sorts of brine, each of a different strength. They are drawn by a pump; and that in the bottom, first brought up, is called *first man*; the next, *middle man*; and the third, *last man*.

Leach BRINE, a name given to what drops from the corned salt in draining and drying, which they preserve and boil again; being stronger than any brine in the pit. There is sand found in all the Staffordshire brines after coction; but naturalists observe, it did not pre-exist in the water, but rather is the product of the boiling. Some steep their seed-wheat in brine, to prevent the smut. Brine is also commended as of efficacy against gangrenes.

BRINE also denotes a pickle pregnant with salt, wherein things are steeped to keep.

BRINE-pans, the pits wherein the salt-water is retained, and suffered to stand, to bear the action of the sun, whereby it is converted into salt. There are divers sorts of salt-pans, as the water-pans, second pan, sun-pan; the water being transferred only from one to another.

BRINE-pit, in salt-making, the salt spring from whence the water to be boiled into salt is taken. There are of these springs in many places; that at Nampt-

wich in Cheshire, is alone sufficient, according to the account of the people of the place, to yield salt for the whole kingdom; but it is under the government of certain lords and regulators, who, that the market may not be overstocked, will not suffer more than a certain quantity of the salt to be made yearly. See the next article.

BRINE Springs, are fountains which flow with salt-water instead of fresh. Of these there are a good number in South Britain, but though not peculiar to this island, are far from being common in the countries on the continent. There are some of them in several different counties; and perhaps, on a due search, others might be discovered*. The most remarkable of these already known are, one at East-Chenock in Somersetshire, about 20 miles from the sea. Another at Leamington in Warwickshire, very near the river Leam; which, however, is but weak. Such a spring likewise runs into the river Cherwell in Oxfordshire, and several more in Westmoreland and Yorkshire: but as they are but poor, and the fuel in most of those counties scarce and dear, no salt is prepared from them. At Barrow-deal near Grange, three miles from Keswick in Cumberland, a pretty strong spring rises in a level near a moss, 16 gallons of the water of which yield one of pure salt; which is the more remarkable, when it is considered that the same quantity of salt cannot be obtained from less than 22 gallons of the waters of the German ocean. At a place called *Salt-Water Haugh*, near Butterpy, in the bishopric of Durham, there are a multitude of salt springs which rise in the middle of the river Wear, for the space of about 40 yards in length and ten in breadth; but particularly one out of a rock, which is so strong that in a hot summer's day the surface will be covered with a pure white salt. At Weston, in Staffordshire, there are brine pits which afford about a ninth part of very fine white salt. There are others at Enson, St Thomas, and in the parish of Ingestre, but so weak that they are not wrought; though it is believed, that by boring, stronger springs might be found in the neighbourhood. In Lancashire there are several salt springs, but (if we except them at Barton, which is as rich as the spring at Norwich) by no means so famous as those of Cheshire, called in general by the name of the *wiches*. Namptwich on the river Weever, has a noble spring not far from the river, which is so rich as to yield one sixth-part of pure white salt. At six miles distant stands Northwich, at the confluence of the Weever and the Dan; where the brine is still richer, since they obtain six ounces of salt from 16 of water. There are even at this day, some visible remains of a Roman causeway between these two towns. The inhabitants of Wales, who, before that country was incorporated into England, were supplied chiefly, if not solely, with that necessary commodity from these two towns, called the former *Hellath Wen*, and the latter *Hellath Du*; i. e. the white and black salt pit. In 1670, a rock of salt was discovered at a small distance from Norwich, which has been wrought to a great depth, and to a vast extent, so as to be justly esteemed one of the greatest curiosities in England; and it is highly probable, that there is an immense body of fossil salt in the bowels of the earth, under this whole county; since, upon boring, brine pits have been found in many

Brine.

* Campbell's
Political
Survey,
Vol. I.
p. 76.

Bring
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Brioude.

places on both sides the river Weever. This is the more likely, since at Middlewich, which stands at the confluence of the Croke and the Dan, there are salt-springs with a fresh brook running between them. The brines from these pits are of unequal strength; but when mixed, they commonly obtain four ounces of salt from a pound of brine. Experience shows, that in these springs the water is strongest nearest the bottom, richer in dry weather than in wet, and when long drawn than when first wrought. But these are no rules in respect to other salt-springs, since in those of Franche Comte the brine is strongest in wet weather. There are several other bodies dissolved in these brines besides salt; in some a sulphureous substance, which sublimes as the brine heats; a sort of dirty ochre which discolours the brine, but, if suffered to stand, speedily subsides; and in most brines a calcareous, or rather selenitic earth, which settles to the bottom of the pans†.

† See Salt,
and Spring.

To BRING-to, in navigation, to check the course of a ship when she is advancing, by arranging the sails in such a manner, that they shall counteract each other, and prevent her either from retreating or moving forward. In this situation the ship is said to lie by, or lie to; having, according to the sea-phrases, some of her sails *aback*, to oppose the force of those which are full; or having them otherwise shortened by being *furled*, or *hauled up in the brails*.

BRINGING-to, is generally used to detain a ship in any particular station, in order to wait the approach of some other that may be advancing towards her; or to retard her course occasionally near any port in the course of a voyage.

BRINGING-in a Horse, in the manege, the same as to say, keep down the nose of a horse that boars and tosses his nose in the wind: this is done by means of a branch.

BRINING OF CORN, in husbandry, an operation performed on the wheat-seed, in order to prevent the smut. A liquor is to be prepared for this purpose, by putting 70 gallons of water into a tub (like a mash-tub used for brewing), and a corn-bushel of unslaked lime-stone. This is to be well stirred till the whole is dissolved, and left to stand for 30 hours; after which it is to be drained off into another tub, in the manner practised for beer. In this way about a hogthead of strong lime-water will be obtained, to which must be added three pecks of salt. The wheat must be steeped in this pickle, by running it gently, and in small quantities, into a broad-bottomed basket of about 24 inches in diameter, and 20 inches deep, and stirring it. The light seed that floats must be strained off with a strainer, and must not be sown. When the basket has been drawn up, and drained of the pickle, the wheat will be fit for sowing in two hours after the brining.

BRINING of hay-ricks, a practice common in America, of mixing salt with the hay as it is stacked.

BRIONNE, a town of France in Normandy, seated on the river Rille. E. Long. 0. 51. N. Lat. 49. 51.

BRIOUDE, a town of France, in lower Auvergne. There are two Brioudes, three quarters of a mile from each other; the one is called *Church Brioude*, the other *Old Brioude*. The houses are built after the antique manner, and are badly disposed. The canons are all temporal lords and counts. It is in no diocese, but de-

pends immediately on the Pope. There are several convents; and, among the rest, the church of St Ferrol, which is highly celebrated. Near the Old Town is a stone-bridge on the river Allier, which consists of one arch: this is esteemed a stupendous structure, and is thought to be a work of the Romans. The inhabitants have no manufactures. It is situated in E. Long. 3. 25. N. Lat. 45. 14.

BRIQUERAS, a town in Piedmont, seated in the valley of Lucern, three miles from the town of that name, and four south of Pignerol. It had a very strong castle towards the latter end of the 16th century; but when the French got footing in it, it was ruined, that is, before they delivered it up to the duke of Savoy in 1696. E. Long. 7. 24. N. Lat. 44. 41.

BRISACH, a town of Germany, and capital of Brisgaw. It was twice in possession of the French; but restored to the house of Austria, in consequence of treaties of peace. It was a very strong place, but the fortifications have been demolished. It is seated on the Rhine, where there is a bridge of boats. E. Long. 7. 49. N. Lat. 48. 5.

BRISACH (New), a town of France, in Alsace, built by order of Louis XIV. over against Old Brisach, and fortified by Vauban. It is 32 miles south of Strasburg. E. Long. 7. 46. N. Lat. 48. 5.

BRISEIS, or HIPPODAMIA, in fabulous history, the wife of Mynes king of Lyrnessa. After Achilles had taken that city, and killed her husband, she became his captive. That hero loved her tenderly; but Agamemnon taking her from him, she became the accidental cause of numberless disorders in the Grecian army. Achilles, enraged, retired to his tent; and, till the death of Patroclus, refused to fight against the Trojans. The resentment of this prince is finely painted in the Iliad.

BRISGAW, a territory of Germany, in the circle of Suabia, on the eastern banks of the Rhine, about 50 miles in length, and 30 in breadth. The principal places are Old Brisach, New Brisach, Freyburgh, Rhinmarck, and an island in the Rhine.

BRISIACUS MONS (anc. geog.), a town on the right or east side of the Rhine. Now *Brisac*, situate on a round hill; a fortified town of Suabia, and distinguished by the name of *Old Brisac*. E. Long. 7. 15. N. Lat. 48. 10.

BRISOT (Peter), one of the ablest physicians of the 16th century, was born at Fontenai le Comte in Poictou. He studied at Paris; and, having taken his doctor's degree, bent his thoughts to the reforming of physic, by restoring the precepts of Hippocrates and Galen, and exploding the maxims of the Arabians: to this purpose he publicly explained Galen's works, instead of those of Avicenna, Rhasis, and Mesue. He afterwards resolved to travel to acquire the knowledge of plants; and going to Portugal, practised physic in the city of Eboræ. His new method of bleeding in pleurisy, on the side where the pleurisy was, raised a kind of civil war among the Portuguese physicians; it was brought before the university of Salamanca, who at last gave judgment, that the opinion ascribed to Brissot was the pure doctrine of Galen. The partizans of Denys, his opponent, appealed in 1529 to the emperor, to prevent the practice, as being attended with destructive consequences; but Charles III. duke of Savoy hap-

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pening to die at this time of a pleurisy, after having been bled on the opposite side, the prosecution dropped. He wrote an Apology for his practice; but died before it was published, in 1552; but Anthony Lucius, his friend, printed it at Paris three years after. Renatus Moreau procured a new edition of it at Paris, in 1622; and annexed to it a treatise intitled *De missione sanguinis in pleuritide*, together with the Life of Brissot.

BRISTLE, a rigid glossy kind of hair found on swine, and much used by brush-makers, &c.

BRISTOL, a city of England, and inferior to none, except London, for wealth, trade, and number of inhabitants. Bristol is a corruption of *Brightflow*, as it was called by the Saxons. It is thought to have stood anciently altogether on the west or Somersetshire side of the Avon, before the bridge was built; but after that, it came to be partly in Somersetshire and partly in Gloucestershire, until it was made a county of itself, though even before that, in the parliament rolls, it was always placed in Somersetshire. At present, the east side is by much the largest and most populous. It had anciently a castle, built by Robert earl of Gloucester, natural son to Henry I. which was demolished by Cromwell; and the ground is now laid out into streets. The corporation consists of a mayor; recorder; twelve aldermen, of whom the recorder is one; two sheriffs; and twenty-eight common-council men. The recorder is generally a serjeant at law, and sits as judge in capital and all other criminal causes. The mayor, to support his dignity, and defray his extraordinary expence, is intitled to certain fees from ships, which long ago amounted to L. 500 or L. 600. Bristol is a bishop's see, being one of the six erected by King Henry VIII. out of the spoils of the monasteries and religious houses which that monarch had got dissolved. The cathedral church was the church of the abbey of St Austin in Bristol, founded by Robert Fitzharding son to a king of Denmark, once a citizen here, by him filled with canons regular in the year 1148. At the reformation King Henry VIII. placed therein a dean and six prebendaries, which mode of government still continues. During a great part of Queen Elizabeth's reign, his see was held in *commendam* by the bishop of Gloucester. This diocese was formed chiefly out of the diocese of Salisbury, with a small part from the dioceses of Wells and Worcester. It contains most of the city of Bristol, and all the county of Dorset, in which are 236 parishes, of which 64 are impropriated. It hath only one archdeaconry, viz. of Dorset; is valued in the king's books L. 338 : 8 : 4, and is computed to be annually worth L. 1500, including its *commendams*. The tenths of the clergy, L. 353, 18 s. 0 $\frac{1}{4}$ d. This see hath yielded to the state one Lord Privy Seal. The revenues of the abbey of St Augustine, or St Austin, in Bristol, was valued at the dissolution at L. 670 : 13 : 11, when it was erected into a cathedral by King Henry VIII. by the name of the *Cathedral Church of the Holy Trinity*. To this cathedral belongs a bishop, a dean, an archdeacon, a chancellor, six prebendaries, and other inferior officers and servants. Besides the cathedral, there are 18 parish-churches; and here are dissenters of all denominations, of whom the Quakers are very respectable both for their wealth and numbers. Of the parish-churches,

Bristol.

St Mary Ratcliff is reckoned one of the finest, not only here, but in the whole kingdom. In this church, besides two monuments of the founder William Cannings, who had been five times mayor of this city, one in the habit of a magistrate, and another in that of a priest (for in his latter days he took orders), there is one of Sir William Penn, father to the famous quaker. The old bridge over the Avon consisted of four broad arches, with houses on both sides like those formerly on London bridge; but this has been lately pulled down, and another erected in its place. No carts or waggons are admitted into Bristol, for fear of damaging the vaults and gutters made under ground for carrying the filth of the city into the river. Queen's-square, in this city, is larger than any in London, except Lincoln's inn-fields, and has in the centre an equestrian statue of King William III. All the gates of the city remain entire, and a part of the walls; the rest were razed in the reign of William Rufus. It is almost as broad as long, about seven miles in circumference, and contains about 95,000 inhabitants. Of the hospitals, the chief are, 1. That called Queen Elizabeth's, in which 100 boys are taught reading, writing, arithmetic, and navigation; six of whom, when they go out, have L. 10, and the rest L. 8, 8 s. to bind them apprentices: the master is allowed L. 450 a year for the maintenance of the boys. 2. Colston's hospital; in which 100 boys are maintained for seven years, and taught and apprenticed, as in Queen Elizabeth's. 3. Another founded by the same gentleman in 1691, for 12 men and 12 women, with an allowance of 3 s. per week, and 24 sacks of coals in the year. This charity cost the founder L. 25,000. 4. Another founded partly by Mr Colston and partly by the merchants, in which 18 men on account of the merchants, and 12 men and women on account of Mr Colston, are maintained. 5. An infirmary, which was opened in 1736 for the sick, lame, and distressed poor of the city, which is maintained by subscription, besides L. 5000 bequeathed to it by John Eldridge, Esq; formerly comptroller of the customs at this port. There are, besides these, a bridewell, several alms-houses, and charity-schools. There is also a guildhall for the sessions and assizes; the mayor's and sheriffs courts; a council-house, where the mayor and aldermen meet every day, except Sundays, to administer justice; a handsome new exchange, with three entrances, about two-thirds as large as that in London; and a quay half a mile in length, the most commodious in England for shipping and landing goods, for which purpose it is provided with several cranes. In College-green is a stately high cross, with the effigies of several kings round it. In Winch-street is a guard-house, with barracks for soldiers. As to the trade of this city, it was computed many years ago to be much greater in proportion, especially to America and the West Indies, than that of London. Fifty sail, some of them ships of considerable burthen, have arrived here at one time, or very near one another, from the West Indies. For this trade, and that to Ireland, it is much better situated than London, besides the great advantages it possesses of an inland navigation by the Wye and Severn. Their trade extends to the Baltic, Norway, Holland, Ham-burgh, Guinea, and the Straits. The largest ships are discharged at Hungroad, four miles below the city, and the goods are brought to the quay by lighters.

For.

Bristol. For building, equipping, and repairing ships, there are docks, yards, rope-walks, and ship-wrights. Here are some considerable woollen manufactures; and no less than 15 glass-houses, for which Kingswood and Mendip furnish the coals. The city companies are 13: 1. The merchant adventurers. 2. The merchant tailors. 3. The mercers. 4. The soap-boilers. 5. The tobaccoists. 6. The butchers. 7. The barbers. 8. The tylers. 9. The holliers, who are the sled-men. 10. Shoemakers. 11. Coopers. 12. Bakers. 13. Smiths. For supplying the city with water there are six public conduits; and handsome hackney-coaches may be hired at very reasonable rates, but they do not ply in the streets. There are also stage-coaches, which set out every day for Bath, London, and other places. A mile below the city, close by the river, is the hot well, whose waters are specific for the diabetes, and good in pthical, scorbutic, and inflammatory disorders. Hither is a great resort in the summer of invalids, as well as other company; for whose accommodation and entertainment there is a pump-room, ball-room, coffee-house, with taverns, and a great number of elegant lodging-houses, both below on a level with the well, and above in the delightful village of Clifton, which is situated on the brow of a hill, from whence there are downs extending several miles, where the company ride out for exercise. Nothing can be more pure and salutary than the air of these downs, which afford a variety of the most romantic and agreeable prospects, comprehending Kingroad, with the ships at anchor, the mouth of the Severn, and the mountains of Wales. In the rocks above the well are found those six-cornered stones called *Bristol-stones*; but they are not so plentiful now as in Camden's days, when, he says, whole bushels might have been easily gathered. In this city is a theatre, where plays are acted almost every night during the recess of the comedians from the metropolis. There are two annual fairs, to which the concourse is so great, that the neighbouring inns have filled 100 beds a-piece with their guests. In the winter season there is an assembly every Thursday for the gayer part of the citizens of both sexes. About half way betwixt Bristol and Bath, at a place called *Warmly*, a company of Bristol merchants have erected a noble manufacture of pins and other brass utensils, which employs a great number of hands, including about 200 children of both sexes from seven to twelve or thirteen years of age. All the different operations of melting, plitting, drawing, hammering, turning, &c. are performed by wheels worked with water, which is raised by two fire-engines of a very curious mechanism. The city of Bristol gives the title of earl to the family of Hervey, and sends two members to parliament. It is worth observing, that whoever marries a citizen's daughter becomes free of the city.

New BRISTOL, the capital of the county of Bucks in Pennsylvania, situated on the river Delawar, about 20 miles north of Philadelphia, in W. Long. 75. N. Lat. 40. 45.

BRISTOL Water. Of the four principal warm waters naturally produced in England this is the least so. As the Bath waters are proper where the secretions are defective, so the Bristol water is of service where they exceed the requirements of health. The Bath water warms; the Bristol cools. Bath water helps the sto-

mach, intestines, and nerves; the Bristol favours the lungs, kidneys, and bladder. Except a jaundice attend, the Bristol water may be of use in dropsies by its drying and diuretic qualities. Dr Winter asserts, that there is no iron in Bristol water; and that its mineral contents are chalk, lapis calcareous, and calaminaris. Five gallons of this water, after evaporation, afforded only 3 iii. and gr. ii. of a mineral-like substance. The diseases in which this water is useful are internal hæmorrhagies, immoderate menses, internal inflammations, spitting blood, dysentery, purulent ulcers of the viscera, consumption, dropsy, scurvy with heat, stone, gravel, strangury, habitual gout, atrophy, slow fever, scrophula, gleet, and diabetes, in which last it is a specific, and may be drank as freely as the thirst requires it. The hotter months are the best for using it. The Bristol and Matlock waters are of exactly the same qualities. Doctors Mead and Lane first established the reputation of Bristol waters in diseases of the kidneys and bladder.

BRITAIN, or GREAT BRITAIN, the most considerable of all the European islands, extends from the Lizard Point, in the latitude of about 50° to Dunelby-head in latitude 58. 30. N. or, taking it in a straight line from north to south, about eight degrees or 550 miles; and from Dover-head on the east to Land's-end on the west comprehends about seven degrees of longitude, which may be computed at about 290 miles; but the form being very irregular, and lessening continually towards the north, proper allowances must be made in computing its dimensions.

The ancient name of this island was *Albion*, the name ^I *Britain* being then common to all the islands round it. ^{Albion the ancient name.} Hence Agathemerus, speaking of the British islands, name.

"They are many in number (says he); but the most considerable among them are Hibernia and Albion." And Ptolemy, to the chapter wherein he describes the island now called *Great Britain*, prefixes the following title: "The situation of *Albion* a British island." But as this far excelled the other British islands, the name of *Albion* in process of time was laid quite aside, and that of *Britain* used in its stead. By this name it was known in Pliny's time, and even in Cæsar's. The origin ² of both these names is very uncertain. Some derive that ^{Origin of the different names.} of *Albion* from the Greek word *alphon*, which, according to Festus, signifies *white*, the chalky cliffs, that in several places rise on the southern coasts having that colour; while others pretend this name to have been borrowed from a giant feigned to have been the son of Neptune, and mentioned by several ancient authors. Some etymologists have recourse to the Hebrew, and others to the Phœnician; *alben* in the former signifying *white*, and *alp* in the latter signifying *high*. The origin of the name *Britain* is no less uncertain than that of *Albion*. Nennius and some other British writers derive it from Brutus, whom they likewise call *Bruto*, the fifth in descent from the celebrated Æneas. Others derive it from the British words *pryd cain*, that is, a *white form*, softened by degrees into *Britannia*. Camden derives it from the word *brith*, which, in the ancient language of the island, signifies *painted*; and *tania*, importing, in Greek, a region or country; so that the word *Brithania*, changed in process of time into *Britannia*, expresses what the Britons really were, that is, *painted*. Somner, disliking Camden's etymology,

Britain.

gy, proposes another, viz. that the name *Britain* comes from *brydio*; signifying, in the British tongue, *rage*, and pointing out the violent motion of the sea that surrounds the island. Mr Whittaker, in his History of Manchester, derives it from the word *brith*, *briet*, *brit*, *bris*, or *brig*, which, he says, signifies *divided* or *striped*. Against the first of these etymologies it may be objected, that it is founded on a fable: and against the other four lies one common and unanswerable objection; which is, that the name of *Britain* was given to the island by foreigners, who could not borrow it from the British tongue, with which they were in all likelihood unacquainted. That the island received the name of *Britain* from foreigners is evident, since the natives never styled themselves *Britons*, nor their country *Britain*; their true name being *Cumri*, or *Cumbri*; whence *Cambria* the name of Wales to this day among the Welsh.

3
Bochart's
opinion.

The learned Bochart, speaking of the colonies and language of the Phœnicians, offers a conjecture which most of our modern writers have adopted as the most natural. The Phœnicians, according to that writer, called this island and some others near it, *Barat Anas*, that is, *the land or country of tin or lead*, and more contractedly *Bratanac*; which name, passing from the Phœnicians to the Greeks, and from these to the Romans, might have been softened into that of *Britannica*, and *Britannia*. That the Phœnicians first discovered these islands, which were afterwards by the Greeks called *Cassiterides*, and are proved by Camden to be our Scilly islands, appears both from Strabo and Pliny; of whom the former tells us, that the Phœnicians first brought tin from the *Cassiterides*, which they sold to the Greeks; but kept the trade to themselves, and the place private; and the latter writes, that Mediocritus was the first who brought lead from the *Cassiterides*; where Bochart shows that we ought to read *Melichartus*, who is the Phœnician Hercules of Sanchoniatho, to whom that nation ascribe their first western discoveries. But notwithstanding the care of the Phœnicians to conceal these islands, the Greeks at last discovered them; and gave them the name of *Cassiterides*, which, in the Greek tongue, signifies the same with *Barat Anac* in the Phœnician. This name was at first given to the islands of Scilly already mentioned, but by degrees communicated to all the others lying in the same sea. Thus Bochart. But after all, his opinion, however plausible in appearance, may be as foreign to the purpose as any of the rest; many instances of names given to new-discovered countries showing that the origin of such names is not always owing to reason, but often to chance or caprice.

The general division of Britain is into ENGLAND, SCOTLAND, and WALES; for a particular description and history of which, see these articles.

4
James VI.
of Scotland
succeeds to
the crown
of England.

In the year 1603, the kingdoms of Scotland and England fell under the dominion of one sovereign, by the accession of James VI. of Scotland to the throne of England. He derived his title to the latter from being the grandson of Margaret eldest daughter to Henry VII. of that kingdom; and, on the failure of all the male line, his hereditary right remained incontestable. Queen Elizabeth, with her latest breath, had recognized him for her successor; so that few sovereigns ever ascended a throne with more approbation

of their subjects, or greater hopes of a peaceable and happy reign.

Britain.

Those hopes, however, were soon blasted; and the history of this monarch's reign consists of little else than a detail of disputes and contentions between him and his parliament. A particular and minute account of such transactions could afford very little entertainment; but it is of importance to know their origin, as they are to be reckoned the ultimate causes of those succeeding events which make so conspicuous a figure in the annals of Britain.

In those barbarous ages which preceded the period we are now entering upon, the human mind, enervated by superstition, and obscured by ignorance of every art and science, seemed to have given up all pretensions to liberty, either religious or civil. Unlimited and untrouled despotism prevailed every where; and though England suffered less in this respect than almost any other nation, the many examples of arbitrary power exerted by her sovereigns, Queen Elizabeth herself, James's immediate predecessor, not excepted, show that they were very far from being then a free people. An incontestable proof of this, and an evidence how little restraint at that time the people could lay upon the authority of the sovereign, is, that the proceedings of parliament were accounted, even by themselves, of so little consequence, that they were not at the trouble to keep journals of them. It was not till the year 1607, four years after the accession of James, that parliamentary journals were kept, at the motion of Sir Edwin Sandys, a member of great authority in the house.

5
General
state of the
nation at
that time.

The proceedings of the parliament being at that time of so little consequence, it is no wonder that the sessions were not regular, or that little attention was paid to the choice or continuance of the members. In the reign of Elizabeth, and her predecessors, the sessions of parliament did not continue above the twelfth part so long as the vacations. It was then usual, after parliaments had been prolonged beyond one session, for the chancellor to exert a discretionary authority of issuing new writs to supply the place of any members whom he judged incapable of attending, either on account of their employment, sickness, or other impediment. No practice could be more dangerous to liberty than this, as it gave the chancellor, and consequently the sovereign, an opportunity of garbling at pleasure the representatives of the nation: yet so little was liberty at that time understood, that the commons, of their own accord, without the least court influence or intrigue, and contrary to some former votes of their own, confirmed the chancellor's power in this respect in the 23d of Elizabeth. Nor did they proceed any farther in the assertion of their privileges, than to vote, that "during the sitting of parliament there do not, at any time, any writ go out for the choosing or returning any member without the warrant of the house."

6

Parlia-
ments of
little con-
sideration.

Towards the end of the 16th or beginning of the 17th century, a great revolution took place, though insensibly, throughout all Europe. Arts and sciences began to flourish, commerce and navigation were greatly extended, and learning of all kinds began to diffuse itself. By more enlarged views, the love of freedom began, in England especially, to take place in the breasts of most people of birth and education; and this was greatly

7
Origin of
the patriotic
party.

Britain.

greatly promoted by an acquaintance with the ancient Greek and Latin historians. From the example of the republics of Greece and Rome, whose members had so often sacrificed their lives for the sake of liberty, a patriotic spirit began to arise; and a desire of circumscribing the excessive prerogative and arbitrary proceedings of the crown began secretly to take place throughout the nation.

8
Grievances
the nation
at that time
laboured
under.

Nor was this desire unreasonable, or without a solid foundation. During the last years of queen Elizabeth's reign, the commerce, navigation, and number of seamen in England, had sensibly decayed. A remonstrance from the Trinity-house in 1602 says, that since 1588, the number of seamen and shipping had decayed about a third part. Every species of domestic industry was fettered by monopolies; and by exclusive companies, which are only another species of monopoly, almost all foreign trade, except that to France, was brought into the hands of a few rapacious engrossers, and all prospect of future improvement in commerce was for ever sacrificed to a little temporary advantage of the sovereign. These companies, though arbitrarily erected, had carried their privileges so far, that almost all the commerce of England centered in London; the customs of that port alone amounted to 110,000*l.* a-year; while those of all the kingdom beside amounted only to 17,000*l.*; nay, the whole trade of London was confined to about 200 citizens, who were easily enabled, by combining among themselves, to fix whatever price they pleased both on the exports and imports of the nation. Besides this, the subjects were burdened by wardships and purveyances. The latter was an old prerogative of the crown, by which the officers of the household were empowered to take, without consent of the owners, provisions for the king's family, and carts and horses for the removal of his baggage, upon paying a stated price for them. The king had also a power of sending any person, without his consent, on whatever message he pleased; and thus he could easily force any individual to pay him whatever money he chose, rather than be sent out of the country on a disagreeable errand. Money extorted from individuals, by this or any other method, was called a *benevolence*.

9
James's arbitrary system of government.

These were some of the grievances under which the nation at this time laboured, and these the rising spirit of patriotism tended to redress. This disposition, however, the severe government of Elizabeth had confined within very narrow bounds: but when James succeeded to the throne; a foreign prince, less dreaded and less beloved; symptoms of a more free and independent genius immediately appeared. Happily James neither perceived the alteration, nor had sufficient capacity to check its early advances. He had established in his own mind a speculative system of absolute government, which few of his subjects, and none but traitors and rebels, he thought, would make any scruple to admit. He considered himself as intitled to equal prerogatives with other European sovereigns, not considering the military force with which their despotism was supported. The almost unlimited power which, for upwards of a century, had been exercised by the English sovereigns, he considered as due to royal birth and title, not to the prudence and spirit of those monarchs, or the conjunctures of the times. In his person, therefore, he imagined all legal power to be centered by an heredi-

tary and a divine right; nay, so fully was he persuaded that he was the absolute proprietor of his subjects, that in his speech to the parliament in 1621, he told them, that he "wished them to have said that their privileges were derived from the grace and permission of him and his ancestors." And when the same parliament protested that "the liberties, franchises, privileges, and jurisdictions of parliament, are the ancient and undoubted birthright and inheritance of the subjects of England," he was so enraged, that sending for the journals of the commons, he, with his own hand, before the council, tore out this protestation; and ordered his reasons to be inserted in the council book.

Such were the opposite dispositions of the prince and parliament, at the commencement of the Scottish line; dispositions just beginning to exist and to appear in parliament, but thoroughly established, and openly avowed on the part of the king, throughout his whole reign.

The consequence of such opposite dispositions prevailing in the king and parliament was, that during this reign the prerogatives of the crown were violently and openly attacked; but the chief grounds of discontent were money and religion. The king's high notions of the royal prerogative made him imagine he had a right to whatever sums he pleased to demand; and his profusion caused him to dissipate in a short time the scanty supplies he could extort from the parliament, who seem to have behaved as unreasonably on the one hand as James himself did on the other. With regard to religious matters, the nation was at that time greatly infected with puritanism. Though the severities of Elizabeth had almost totally suppressed the Papists, it had been otherwise with the Puritans. So much had they increased by the very means which had diminished the number of catholics, that no less than 750 clergymen of that persuasion signed a petition to James on his succession. They hoped that the king, having received his education in Scotland, and having always professed an attachment to the church established there, would at least abate the rigour of the laws enacted against the Puritans, if he did not show them particular favour and encouragement. But in this they were mistaken. He had observed in their Scots brethren a violent turn toward republicanism, and a zealous attachment to civil liberty. In the capacities both of monarch and theologian, he had experienced the little complaisance they were disposed to show him. They controuled his commands; disputed his tenets; and to his face, before the whole people, censured his conduct and behaviour. This superiority assumed by the presbyterian clergy, the monarchic pride of James could never digest. Though he had been obliged while in Scotland to court their favour, he treasured up on that account the stronger resentment against them; and was determined to make them feel in their turn the weight of his authority. He therefore not only rejected the petition of the 750 clergymen above mentioned, but throughout his whole reign refused to relax in the least the severity of the laws against Protestant nonconformists, though very often petitioned in their favour by his parliament.

The same principles which occasioned in James such an aversion to the Puritans, prompted him greatly to favour the episcopals, and even the Papists, as being greater

Britain.

10
Reasons of
the difference
between the
king and
parliament.

11
Aversion of
James to
the Puritans

12
He favours
the Episcopals and
Papists.

Britain. greater friends to despotism. In his youth he had been suspected of a bias towards the religion of the latter; and when he ascended the throne of England, it is certain he often endeavoured to procure some mitigation of the laws against them, if not an absolute toleration. But in this he was constantly opposed by the parliament; and indeed the strong inclination shown by James to establish episcopacy throughout every corner of his dominions, tended very much to alienate the minds of the generality of his subjects, especially in Scotland, entirely from him.

13
Attempts to
establish e-
piscopacy in
Scotland.

In May 1617, the king set out for Scotland, expressly with the design of establishing episcopacy in that kingdom. He did not, however, propose to abolish presbytery entirely, and set up absolute episcopacy in its room. He designed to content himself with establishing the royal authority above the ecclesiastical, and introducing some ceremonies into the public worship, such as kneeling at the sacrament, private communion, private baptism, confirmation of children, and the observance of Christmas, &c. But as his design was fully seen from the beginning, every advance towards episcopacy gave the greatest discontent, and those trivial ceremonies were rejected as so many mortal sins.

14
Tyranny of
the Scots
clergy.

At this time the power of the Scots clergy was exceedingly great; and the gloomy enthusiastic spirit with which they were actuated, prompted them to exercise it in such a manner as to make their tyranny insupportable to those who were of a different way of thinking from themselves. Every ecclesiastical court possessed the power of excommunication; which was then attended with some very serious temporal consequences, besides the spiritual ones which were supposed to flow from it. The person excommunicated was shunned by every one as profane and impious: his whole estate during his life-time, and all his moveables for ever, were forfeited to the crown. A sentence of excommunication was sometimes pronounced in a summary manner, by any ecclesiastical court however inferior, against any person whether he lived within the bounds of their jurisdiction or not. And by this means, the whole tyranny of the inquisition, though without its orders, was introduced into Scotland. But the clergymen were not satisfied with this unbounded authority in ecclesiastical matters; they assumed a censorial power over every part of administration; and in all their sermons and even prayers mingling politics with religion, they inculcated the most seditious and turbulent principles.

15
Anecdotes
of some of
them.

One Black, a minister of St Andrew's, went so far as to pronounce in one of his sermons, that all kings were the devil's children; and in his prayer for the queen he used these words, "We must pray for her for the fashion's sake, but we have no cause: she will never do us any good." Another minister preaching in the principal church of that capital, said, that the king was possessed with a devil; and that, one devil being expelled, seven worse had entered in his place. To which he added, that the subjects might lawfully rise, and take the sword out of the hands of their sovereign.

16
The king's
design mis-
gives in
Scotland.

We can scarce wonder that James should be desirous of subjugating such rebellious and turbulent spirits as these; and, on the other hand, considering the extreme weakness of this monarch's understanding, and that he imagined himself able to manage not only fu-

rious religionists, but even the most powerful foreign nations, with no other weapon than mere argumentation, we can as little wonder at his want of success.—In short, so far was James from being able to establish his royal authority above the ecclesiastical, that he found himself unable to introduce a single ceremony. He returned therefore with the mortification not only of seeing his schemes entirely baffled with regard to Scotland, but of having disgusted even the few of that nation over whom religious prejudices did not prevail: for they, considering the ceremonies so much insisted on by the king as trivial and insignificant, could not help thinking the national honour sacrificed by a servile imitation of the modes of worship practised in England, and that their sovereign betrayed equal narrowness of mind, though in an opposite manner, with those he so much condemned.

The like bad success attended James when he at-
17
tempted some opposition to the puritanical innovations. He had observed in his progress through that kingdom, that a Judaical observance of the Sunday gained ground every day: and that by this means, under colour of religion, the people were debarred from such sports and recreations as contributed to their health as well as amusement. Imagining, therefore, that it would be easy to infuse cheerfulness into the dark spirit of devotion which then prevailed, he issued a proclamation to allow and encourage, after divine service, all kinds of lawful games and exercises; and this proclamation his subjects regarded as an instance of the utmost profaneness and impiety. In 1620 a bill was brought in by the commons for the more strict observance of the Sunday, which they affected to call the *sabbath*. One Shepherd opposed this bill, objected to the appellation of *sabbath* as puritanical, and seems even to have justified sports on that day. For this he was expelled the house by the suggestion of Mr Pym; and in the sentence pronounced against Shepherd, his offence is said to be *great, exorbitant, and unparalleled*.

His bad suc-
cess against
the puritans
in England.

This sketch, we hope, will be sufficient to give the reader a tolerable idea of the situation of affairs during the reign of James I. We now proceed to give an account of the few remarkable transactions which occurred in this period.

The first thing of any consequence was a conspiracy
18
formed, the very year of the king's accession to the throne, to displace him, and bestow the kingdom on Sir Walter Raleigh's
conspiracy.
Arabella Stuart, a near relation of James's, and equally descended from Henry VII. With regard to this conspiracy every thing remains still mysterious, as it was at the time when the conspiracy itself was discovered. What renders it remarkable is the concern Sir Walter Raleigh was said to have in it; for which he was tried, condemned without sufficient proof, suffered 13 years imprisonment in the tower, and was afterwards executed out of complaisance to the Spaniards. See RALEIGH.

In 1605 was discovered the famous *gunpowder trea-*
19
son, the anniversary of which discovery hath ever af-
terwards been celebrated with rejoicings. Its origin
was as follows: On the accession of James, great ex-
pectations had been formed by the catholics that he
would prove favourable to them, both as that was the
religion of his mother, and as he himself had been
sus-

Account of
the gun-
powder
treason.

Britain.

suspected of a bias towards it in his youth. It is even pretended that he had entered into positive engagements to grant them a toleration as soon as he should mount the throne of England. Here, however, they found their hopes built on a false foundation. James on all occasions expressed his intention of executing strictly the laws enacted against them, and of persevering in all the rigorous measures of Queen Elizabeth. A plan of revenge was first thought of by one Catesby, a gentleman of good parts, and of an ancient family. He communicated his mind to Percy, a descendant of the house of Northumberland. The latter proposed to assassinate the king; but this seemed to Catesby very far from being adequate to their purpose. He told Percy, that the king would be succeeded by his children, who would also inherit his maxims of government. He told him, that even though the whole royal family were destroyed, the parliament, nobility, and gentry, who were all infected with the same heresy, would raise another Protestant prince to the throne.

20
Catesby's
speech.

"To serve any good purpose (says he), we must destroy, at one blow, the king, the royal family, the lords and commons; and bury all our enemies in one common ruin. Happily they are all assembled on the first meeting of parliament; and afford us the opportunity of glorious and useful vengeance. Great preparations will not be requisite. A few of us may run a mine below the hall in which they meet; and choosing the very moment when the king harangues both the houses, consign over to destruction those determined foes to all piety and religion. Mean while, we ourselves standing aloof, safe and unsuspected, shall triumph in being the instruments of divine wrath, and shall behold with pleasure those sacrilegious walls, in which were passed the edicts for proscribing our church and butchering her children, tossed into a thousand fragments; while their impious inhabitants, meditating perhaps still new persecutions against us, pass from flames above to flames below, there for ever to endure the torments due to their offences."

21
Prepara-
tions for the
execution of
the plot.

This terrible scheme being approved of, it was resolved to communicate it to a few more. One Thomas Winter was sent over to Flanders in quest of Fawkes, an officer in the Spanish service of approved zeal and courage. All the conspirators were bound by the most solemn oaths, accompanied with the sacrament; and to such a degree had superstition effaced every principle of humanity from their minds, that not one of them ever entertained the smallest compunction for the cruel massacre they were going to commit. Some indeed were startled at the thoughts of destroying a number of catholics who must necessarily be present as spectators, or attendants on the king, or as having seats in the house of peers. But Tesmond a Jesuit, and Garnet superior of that order in England, removed those scruples, by showing that the interest of religion required in this case the sacrifice of the innocent with the guilty.

This happened in the spring and summer of 1604; when the conspirators also hired a house in Percy's name, adjoining to that in which the parliament was to assemble. Towards the end of that year they began to pierce through the wall of the house, in order to get in below that where the parliament was to sit. The wall was three yards thick, and consequently occasioned a great deal of labour. At length, however, they ap-

proached the other side, but were then startled by a noise for which they could not well account. Upon inquiry, they found that it came from a vault below the house of lords; that a magazine of coals had been kept there; and that the coals were then selling off, after which the vault would be let to the highest bidder. Upon this the vault was immediately hired by Percy; 36 barrels of powder lodged in it; the whole covered up with faggots and billets; the doors of the cellar boldly flung open; and every body admitted as if it contained nothing dangerous.

Being now, as they thought, assured of success, the conspirators began to plan the remaining part of their enterprize. The king, the queen, and prince Henry, were expected to be present at the opening of the parliament. The duke, by reason of his tender age, would be absent, and it was resolved that Percy should seize or murder him. The princess Elizabeth, likewise a child, was kept at Lord Harrington's house in Warwickshire; and some others of the conspirators engaged to assemble their friends on pretence of a hunting match, when they were to seize that princess, and immediately proclaim her queen. The day so long wished for at last approached; the dreadful secret, tho' communicated to more than 20 persons, had been religiously kept for near a year and an half; and nothing could be foreseen which could possibly prevent the success of their design. Ten days before the meeting of parliament, however, lord Monteagle, a catholic, son to lord Morley, received the following letter, which had been delivered to his servant by an unknown hand. "My lord, out of the love I bear to some of your friends, I have a care for your preservation. Therefore I would advise you, as you tender your life, to devise some excuse to shift off your attendance on this parliament. For God and man have determined to punish the wickedness of this time. And think not slightly of this advertisement; but retire yourself into the country, where you may expect the event in safety. For, tho' there be no appearance of any stir, yet, I say, they shall receive a terrible blow this parliament; and yet they shall not see who hurts them. This counsel is not to be contemned, because it may do you good, and can do you no harm: for the danger is over as soon as you have burned this letter. And I hope God will give you the grace to make good use of it, to whose holy protection I commend you."—Though Monteagle imagined this letter to be only a ridiculous artifice to frighten him, he immediately carried it to lord Salisbury, secretary of state; who laid it before the king on his arrival in town a few days after.

22
Conspiracy
discovered.

The king looked upon the letter in a more serious light. From the manner in which it was wrote he concluded that some design was forming to blow up the parliament-house with gunpowder, and it was thought advisable to search the vaults below. The lord chamberlain, to whom this charge belonged, purposely delayed the search till the day before the meeting of parliament. He remarked those great piles of wood and faggots which lay in the vault under the upper-house; and casting his eye upon Fawkes, who stood in a corner and passed himself for Percy's servant, he took notice of that daring and determined courage which was conspicuous in his face, and so much distinguished this conspirator even amongst the

²³ **Britain.** the other heroes in villany that were concerned in the scheme. Such a quantity of fuel, also, for one who lived so little in the town as Percy, appeared somewhat extraordinary; and, upon comparing all circumstances, it was resolved to make a further search. About midnight, Sir Thomas Knevet, a justice of peace, was sent with proper attendants; and before the door of the vault, finding Fawkes, who had just finished all his preparations, he immediately seized him, and, turning over the faggots, discovered the powder. The matches and every thing proper for setting fire to the train were taken in Fawkes's pocket; who seeing now no refuge but in boldness and despair, expressed the utmost regret that he had lost the opportunity of firing the powder at once, and of sweetening his own death by that of his enemies. For two or three days he displayed the same obstinate intrepidity; but, being confined in the tower, and the rack just shown to him, his courage at last failed, and he made a full discovery of all the conspirators.

²⁴ **Conspirators punished.** Catesby, Percy, and the other criminals, on hearing that Fawkes was arrested, hurried away to Warwickshire; where Sir Edward Digby, imagining that his confederates had succeeded, was already in arms, to seize the princess Elizabeth. She had escaped into Coventry; and they were obliged to put themselves in a posture of defence against the country-people, who were raised from all quarters and armed by the sheriffs. The conspirators, with all their attendants, never exceeded the number of 80 persons; and being surrounded on every side, could no longer have any hope either of prevailing or escaping. Having therefore confessed themselves, and received absolution, they boldly prepared for death, and resolved to sell their lives as dear as possible. But even this miserable consolation was denied them. Some of their powder took fire, and disabled them from defending themselves. The people then rushed in upon them. Percy and Catesby were killed with one shot. Digby, Rookwood, Winter, and others, being taken prisoners, were tried, confessed their guilt, and died as well as Garnet, by the hands of the common executioner. The lords Stourton and Mordaunt, two catholics, were fined, the former of 4000*l.* the latter of 10,000*l.* by the star-chamber; because their absence from parliament had occasioned a suspicion of their being made acquainted with the conspiracy. The earl of Northumberland was fined 30,000*l.* and detained several years a prisoner in the tower; because, not to mention other grounds of suspicion, he had admitted Percy into the number of gentlemen pensioners, without his taking the requisite oaths.

²⁵ **James's wife conducted in the legislation of Ireland.** In 1612, James appears in his most advantageous point of view, namely, as legislator of Ireland, and the person who undertook to civilize the barbarous inhabitants of that kingdom, and to render their subjection durable and useful to the crown of England. In this work, James proceeded by a steady, regular, and well-concerted plan. He began with abolishing the ancient Irish customs which supplied the place of laws, and which were exceedingly barbarous and absurd. By the Brehon law, every crime however enormous was punished, not with death, but by a fine. Murder itself was compensated in this way. Every one had a value affixed to him, called his *eric*; and whoever was able

to pay this, might kill him when he pleased. As for such slight offences as oppression, extortion, or other things of that nature, no penalty was affixed to them, nor could any redress for them ever be obtained. By the custom of *gavelkinde*, upon the death of any person, his land was divided among all the males of the sept or family, both bastard and legitimate: and after partition made, if any of the sept died, his portion was not shared out among his sons; but the chieftain at his discretion made a new partition of all the lands belonging to that sept, and gave every one his share: as no man, by reason of this custom, enjoyed the fixed property of any land; to build, cultivate, or improve, must have been so much lost labour. Their chieftains were established by election, or, more properly speaking, by force and violence. Their authority was absolute; and, notwithstanding certain lands were assigned to the office, its chief profit resulted from exactions, dues, assessments, for which there was no fixed law, and which were levied at pleasure.

After abolishing these customs, and substituting English law in their place; James having taken all the natives under his protection, and declared them free citizens, proceeded to govern them by a regular administration, military as well as civil. A sufficient army was maintained, its discipline inspected, and its pay transmitted from England, in order to prevent the soldiery from preying upon the country, as had been usual in former reigns. When Odohartie raised an insurrection, a reinforcement was sent over, and the rebellion immediately extinguished. All minds being first quieted by an universal indemnity, circuits were established, justice administered, and crimes of every kind severely punished. As the Irish had been universally engaged in a rebellion against Elizabeth, a resignation of all the rights formerly granted them to separate jurisdictions was rigorously exacted; a resignation of private estates was even required; and when they were restored, the proprietors received them under such conditions as might prevent all future tyranny and oppression over the common people. The whole province of Ulster having fallen to the crown by the attainder of rebels, a company was established in London for planting new colonies in that fertile country. The property was divided into moderate shares, the largest not exceeding 2000 acres: Tenants were brought over from England and Scotland: The Irish were removed from the hills and fastnesses, and settled in the open country: Husbandry and the arts were taught them; and by these means Ulster, from being the most wild and disorderly province in Ireland, soon became the best cultivated and most civilized.

²⁶ **Death of Henry prince of Wales.** This year was also remarkable for the death of Henry prince of Wales, who died suddenly on the 6th of November, not without strong suspicions of poison, for which the king himself was blamed. On opening his body, however, no symptoms of poison appeared; but his death diffused an universal grief throughout the nation, he being reckoned a prince of extraordinary accomplishments.

²⁷ **Marriage of the princess Elizabeth.** The marriage of the princess Elizabeth with Frederic elector palatine, which was celebrated February 14th 1613, served to dissipate the grief which had arisen on account of prince Henry's death. But this marriage, in the event, proved unhappy to the king as well

Britain. as his son-in-law. The elector, trusting to so great an alliance, engaged in enterprizes beyond his strength; and James, not being able, and indeed perhaps not willing, to assist him in his distress, lost entirely what remained of the affections of his people.

²⁸ **The elector of Bohemia.** These bad consequences did not begin to appear till the year 1619. At that time the states of Bohemia having taken arms against the emperor Matthias, in defence of the Protestant religion, and continued their revolt against his successor Ferdinand II. and being alarmed at his mighty preparations against them, made an offer of their crown to the elector palatine. To this they were induced by the greatness of his connections, as being son-in-law to the king of England, and nephew to prince Maurice, whose authority in the United Provinces was almost absolute; and the young palatine, stimulated by ambition, without consulting either James or Maurice, whose opposition he foresaw, immediately accepted the offer, and marched all his forces into Bohemia, in support of his new subjects.

²⁹ **Defeated and driven out of his dominions.**

The affairs of the new king were not long of coming to an unfortunate crisis. It was known almost at one time in England, that Frederic being defeated in the great and decisive battle of Prague, had fled with his family into Holland; and that Spinola the Spanish general had invaded the palatinate, where meeting with little resistance, except from one body of 2400 Englishmen commanded by the brave Sir Horace Vere, had in a little time reduced almost the whole principality. In 1621, the ban of the empire was published against the unfortunate elector, and the execution of it was committed to the duke of Bavaria. The upper palatinate was in a little time conquered by that prince; and measures were taken in the empire for bestowing on him the electoral dignity of which the palatine was despoiled. Frederic was now obliged to live with his numerous family, in poverty and distress, either in Holland, or at Sedan, with his uncle the duke of Bouillon; and the new conquests of the catholics throughout all Germany were attended with persecutions against the Protestants.

³⁰ **English insist for a war with the house of Austria.**

At this news the religious zeal of the English was inflamed to the highest degree; and they would have plunged headlong into a war with the house of Austria, without reflecting in the least on the consequences that might ensue. The sufferings of their Protestant brethren in Germany were the only objects of consideration, and the neutrality and inactive spirit shown by James were loudly exclaimed against. But though James might have defended his pacific measures by very plausible arguments, it is certain that some of his motives were the most ridiculous that can be imagined. Such was the opinion that he himself entertained of his own wisdom, that he imagined himself capable of disarming hostile nations by dint of argument; and that the whole power of Austria, though not awed by the power of England, would submit to his arbitration, merely out of respect to his virtue and moderation.— So much also he was wedded to his opinion concerning the prerogative of kings, that he imagined, wherever there was a contention between any sovereign and his subjects, the latter behoved always to be in the wrong; and for this reason, from the very first he had denied his son-in-law the title of *king of Bohemia*, and forbade

him to be prayed for in the churches under that appellation. Besides these reasons, James was on another account extremely averse to come to a rupture with Spain. He had entertained an opinion peculiar to himself, which was, that any alliance below that of a king was unworthy a prince of Wales; and he never would allow any princess but a daughter of France or Spain to be mentioned as a match for his son. This piece of pride, which really implied meanness as if he could have received honour from any alliance, gave Spain an opportunity of managing this monarch in his most important concerns. With a view to engage him to a neutrality with regard to the succession of Cleves, the eldest daughter of the king of Spain had been indirectly offered during the life of prince Henry. The bait, however, did not then take; James, in consequence of his alliance with the Dutch, marched 4000 men to the assistance of the Protestants, by which means the succession was secured to the Protestant line. In 1618, Gondomar the Spanish ambassador made offer of the king's second daughter to prince Charles; and, that he might render the temptation irresistible to the necessitous James, gave hopes of an immense fortune that should attend the princess. Upon this match James had built great hopes, not only of relieving his own necessities, but of recovering the palatinate for his son-in-law; which last, he imagined, might be procured from the mere motive of friendship and personal attachment.

Britain. ³² He is desirous of a Spanish match for his son.

This last step was equally disagreeable to the commons with the rest; and, joined to the other pieces of James's conduct, at last blew into a flame the contention which had so long subsisted between their sovereign and them. On the 14th of November 1621, the commons framed a remonstrance which they intended to carry to the king. They represented, that the enormous growth of the Austrian power threatened the liberties of Europe; that the progress of the Catholic religion in England bred the most melancholly apprehensions lest it should again acquire an ascendant in the kingdom; that the indulgence of his majesty towards the professors of that religion had encouraged their insolence and temerity; that the uncontrouled conquests made by the Austrian family in Germany raised mighty expectations in the English Papists; but above all, that the Spanish match elevated them so far as to hope for an entire toleration, if not a final re-establishment, of their religion. They therefore intreated his majesty, that he would immediately undertake the defence of the palatinate, and maintain it by force of arms; that he would turn his sword against Spain, whose armies and treasures were the chief support of the Catholic interest in Europe; that he would enter into no negotiation for the marriage of his son but with a Protestant princess; that the children of Popish recusants should be taken from their parents, and committed to the care of Protestant teachers and school-masters; and that the fines and confiscations to which the Catholics by law were liable, should be levied with the utmost severity.

³³ **Commons** averse to this measure.

³⁴ They frame a remonstrance against it.

The king, who was then at Newmarket, hearing of the intended remonstrance, wrote a letter to the speaker, in which he sharply rebuked the house for debating on matters far above their reach and capacity; and he strictly forbade them to meddle with any thing that regarded

³⁵ **Contention** between the king and commons.

Britain. regarded his government, or deep matters of state, and especially not to touch on his son's marriage with the Spanish princess. Upon this the commons framed a new remonstrance, in which they asserted their right of debating on all matters of government, and that they possessed entire freedom of speech in their debates. The king replied, that their remonstrance was more like a denunciation of war, than an address of dutiful subjects; that their pretension to inquire into all state affairs without exception, was such a plenipotency as none of their ancestors, even during the reign of the weakest princes, had ever pretended to; that public transactions depended on a complication of views and intelligence, with which they were entirely unacquainted; that they could not better show their wisdom, as well as duty, than by keeping within their proper sphere; and that in any business which depended on his prerogative, they had no title to interpose with their advice, unless when he pleased to ask it, &c. The commons in return framed the protestation already mentioned, which the king tore out of their journals, and soon after dissolved the parliament. The leading members of the house, Sir Edward Coke and Sir Robert Phillips, were committed to the tower: three others, Selden, Pym, and Mallory, to other prisons; and, as a lighter punishment, some others were sent into Ireland to execute the king's business. Sir John Saville, however, a powerful man in the house of commons, and a zealous opposer of the court, was made comptroller of the household, a privy counsellor, and soon after a baron. This event is memorable; as being the first instance in the English history, of any king's advancing a man on account of parliamentary interest, and of opposition to his measures.

³⁶ **Origin of the factions of whig and tory.** This breach between the king and parliament soon made politics become a general subject of discourse, and every man began to indulge himself in reasonings and inquiries concerning matters of state; and the factions which commenced in parliament were propagated throughout the nation. In vain did James, by reiterated proclamations, forbid discourses of this kind. Such proclamations, if they had any effect, served rather to inflame the curiosity of the public. In every company or society the late transactions became the subject of argument and debate; some taking the side of monarchy, others of liberty; and this was the origin of the two parties since known by the names of *Whigs* and *Tories*.

³⁷ **James gains the favour of the court of Spain.** For five years, James continued the dupe of the court of Spain. Though firmly resolved to contract no alliance with a heretic, the king of Spain had continued to procrastinate and invent one excuse after another, while he pretended to be very willing to conclude the match. At last the king of England, finding out what was really the matter, resolved to remove that obstacle if possible. He issued public orders for discharging all Popish recusants who were imprisoned; and it was daily apprehended that he would forbid, for the future, the execution of the penal laws against them. For this conduct he was obliged to apologize, and even pretend that it was done in order to procure from foreign princes a toleration for the Protestants; the severity of the English laws against catholics, he said, having been urged as a reason against showing any favour to Protestants residing in catholic kingdoms.

These concessions in favour of the catholics, however ill relished by his subjects, at last obtained James's end with regard to the marriage. The earl of Bristol, ambassador at the court of Spain, a minister of vigilance and penetration, and who had formerly opposed the alliance with catholics, being now fully convinced of the Spanish sincerity, was ready to congratulate the king on the completion of his projects. The Spanish princess is represented as very accomplished; she was to bring with her a fortune of L. 600,000; and, what was more, not only Bristol considered this match as an infallible prognostic of the palatine's restoration, but the Spaniards themselves did the same. All things being therefore agreed upon between the parties, nothing was wanting but the dispensation from Rome, which might be considered as a matter of mere formality. The king exulted in his pacific counsels, and boasted of his superior sagacity and penetration; when all his flattering prospects were blasted by the temerity of the duke of Buckingham, who governed both court and nation with almost unlimited sway.

This nobleman had suddenly been raised to the highest honours. Though possessed of some accomplishments of a courtier, he was utterly devoid of every talent of a minister; but at once partook of the insolence which attends a fortune newly acquired, and the impetuosity which belongs to persons born in high stations, and unacquainted with opposition. Among those who had experienced the arrogance of this overgrown favourite, the prince of Wales himself had not been entirely spared; and a great coldness, if not enmity, had for that reason taken place between them. Buckingham being desirous of putting an end to this coldness, and at the same time envious of the great reputation of the earl of Bristol, persuaded the prince to undertake a journey to Madrid; which, he said, would be an unexpected galantry; would equal all the fictions of Spanish romance; and, suiting the amorous and enterprising character of that nation, must immediately introduce him to the princess under the agreeable character of a devoted lover and daring adventurer. Little persuasion was necessary to prevail with prince Charles to undertake this journey; and the impetuosity of Buckingham having extorted a consent from James, our two adventurers set out, prince Charles as the knight-errant, and Buckingham as the squire. They travelled through France in disguise, assuming the names of Jack and Tom Smith. They went to a ball at Paris, where the Prince first saw the princess Henrietta whom he afterwards married, who was then in the bloom of youth and beauty, and with whom the novelists of that time say he then fell in love. On their arrival at Madrid, every body was surprised by a step so little usual among great princes. The Spanish monarch made Charles a visit, expressed the utmost gratitude for the confidence he reposed in him, and made warm protestations of a correspondent confidence and friendship. He gave him a golden key which opened all his apartments, that the prince might, without any introduction, have access to him at all hours: he took the left hand of him on every occasion, except in the apartments assigned to Charles; for there, he said, the prince was at home: Charles was introduced into the palace with the same pomp and ceremony which attend the kings of Spain on their coronation: the council received public orders to obey him as the king.

³⁸ **Marriage with the infanta agreed upon.**

³⁹ **Prince Charles and Buckingham resolve on a journey into Spain.**

⁴⁰ **Their kind reception in that kingdom.**

Britain.

king himself: Olivarez too, the prime minister, though a grandee of Spain, who has the right of being covered before his own king, would not put on his hat in the prince's presence: all the prisons of Spain were thrown open, and all the prisoners received their freedom, as if an event the most honourable and most fortunate had happened to the monarchy; and every sumptuary law with regard to apparel was suspended during prince Charles's residence in Spain. The infanta, however, was only shown to her lover in public; the Spanish ideas of decency being so strict, as not to allow any farther intercourse till the arrival of the dispensation. The point of honour was carried so far by these generous people, that no attempt was made, on account of the advantage they had acquired by having the prince of Wales in their power, to impose any harder conditions of treaty: their pious zeal only prompted them on one occasion to desire more concessions in the religious articles; but, on the opposition of Bristol, they immediately desisted. The Pope, however, hearing of Charles's arrival in Madrid, tacked some new clauses to the dispensation; and it became necessary to transmit the articles to London, that the king might ratify them.

41
Articles of
the marriage
treaty.

This treaty, which was made public, consisted of several articles, chiefly regarding the exercise of the catholic religion by the infanta; and, among these, nothing could reasonably be found fault with, except one article, in which the king promised that the children should be educated by the princess till they were ten years of age; which undoubtedly was insisted upon with a view of seasoning their minds with catholic principles. But, besides this public treaty, there were some private articles sworn to by James, which could not have been made public without grievous murmurs. A suspension of the penal laws against the English catholics was promised, as likewise a repeal of them in parliament, and a toleration for the exercise of that religion in private houses. Meanwhile Gregory XV. who granted the dispensation, died; and Urban VIII. was chosen in his place. Upon this event, the nuncio refused to deliver the dispensation till it should be renewed by Urban. This the crafty pontiff delayed, in hopes that, during the prince's residence in Spain, some expedient might be fallen upon to effect his conversion. The king of England, as well as the prince, became impatient: but, on the first hint, Charles obtained leave to return; and Philip graced his departure with all the circumstances of civility and respect which had attended his arrival. He even erected a pillar on the spot where they took leave of each other, as a monument of mutual friendship: and the prince, having sworn to the observance of all the articles, embarked on board the English fleet at St Andro.

42
The prince
returns.

The modest, reserved, and decent behaviour of Charles, together with his unparalleled confidence in them, and the romantic gallantry he had practised with regard to their princess, had endeared him to the whole court of Madrid. But in the same proportion that Charles was beloved and esteemed, was Buckingham despised and hated. His sallies of passion; his indecent freedoms with the prince; his dissolute pleasures; his arrogant impetuous temper, which he neither could nor would disguise; were to the Spaniards the objects of peculiar aversion. They lamented the infanta's fate, who must

be approached by a man whose temerity seemed to respect no laws divine or human. Buckingham, on the other hand, sensible how odious he was become to the Spaniards, and dreading the influence which that nation would naturally require after the arrival of the infanta, resolved to employ all his credit in order to prevent the marriage. By what arguments he could prevail on the prince to offer such an insult to the Spanish nation, from whom he had received such generous treatment; by what colours he could disguise the ingratitude and imprudence of such a measure; these are totally unknown to us: certain it is, however, that when the prince left Madrid, he was firmly determined, in opposition to his most solemn promises, to break off the treaty with Spain. On their arrival at London, therefore, the prince and Buckingham assumed the entire direction of the negociation; and it was their business to seek for pretences by which they could give a colour to their intended breach of treaty. At last, after many fruitless artifices were employed to delay or prevent the espousals, Bristol received positive orders not to deliver the proxy which had been left in his hands, or to finish the marriage, till security was given for the full restitution of the palatinate. Philip understood this language: but being determined to throw the whole blame of the rupture on the English, he delivered into Bristol's hand a written promise, by which he bound himself to procure the restoration of the palatinate either by persuasion or by every other possible means; and when he found that this concession gave no satisfaction, he ordered the infanta to lay aside the title of *Princess of Wales*, which she bore after the arrival of the dispensation from Rome, and to drop the study of the English language; and as he knew that such rash counsels as now governed the court of England would not stop at the breach of the marriage-treaty, he immediately ordered preparations for war to be made throughout all his dominions.

Britain.

43
Buckingham
prevails
on him
to resolve
against
the
marriage.

44
Philip ob-
liges himself
to procure
the restitu-
tion of the
palatinate.

A match for prince Charles was soon after negotiated with Henrietta, daughter of the great Henry IV. and this met with much better success than the former. However, the king had not the same allurements in prosecuting this match as the former, the portion promised him being much smaller; but, willing that his son should not be altogether disappointed of a bride, as the king of France demanded only the same terms that had been offered to the court of Spain, James thought proper to comply. In an article of this treaty of marriage, it was stipulated, that the education of the children till the age of 13 should belong to the mother; and this probably gave that turn towards popery which has since proved the ruin of the unfortunate family of Stuart.

45
Match with
Henrietta
princess of
France.

James now, being deprived of every other hope of relieving his son-in-law but by force of arms, declared war against Spain and the emperor, for the recovery of Spain, the palatinate; 6000 men were sent over into Holland to assist prince Maurice in his schemes against those powers; the people were every where elated at the courage of their king, and were satisfied with any war which was to exterminate the Papists. This army was followed by another consisting of 12,000 men, commanded by count Mansfeldt; and the court of France promised its assistance. But the English were disappointed in all their views: the troops being embarked

46
War declared
against
Spain.

47
Unsuccessful
expedition
of
count
Mansfeldt.

at

Britain. at Dover, upon sailing to Calais, found no orders for their admission. After waiting for some time, they were obliged to sail towards Zealand, where no proper measures were yet consulted for their disembarkation. Mean while, a pestilential disorder crept in among them, so long cooped up in narrow vessels: half the army died while on board; and the other half, weakened by sickness, appeared too small a body to march into the palatinate; and thus ended this ill-concerted and fruitless expedition. Whether this misfortune had any effect on the king's constitution or not, is uncertain; but he was soon after seized with a tertian ague, which put an end to his life on the 27th of March 1625, after having lived 59 years, and reigned over England 22, and over Scotland almost as long as he lived.

48
Death of
king James.

49.
Succeeded
by his son
Charles I.

50
His affec-
tion for his
people.

51
His charac-
ter.

52.
His first
speech to his
parliament.

53
Their scan-
dalous pro-
ceedings.

James was succeeded by his son Charles I. who ascended the throne amidst the highest praises and caresses of his subjects for what was perhaps the most blame-worthy action of his life, namely, his breaking off the match with the Spanish princess, and procuring the rupture with the house of Austria. Being young and unexperienced, he regarded these praises as sincere; and therefore was so impatient to assemble the great council of the nation, that he would gladly, for the sake of dispatch, have called together the same parliament which sat under his father, and which lay at that time under prorogation. But being told that such a measure would appear unusual, he issued writs for summoning a new parliament on the 7th of May; and it was not without regret that the arrival of the princess Henrietta, whom he had espoused by proxy, obliged him to delay, by repeated prorogations, their meeting till the 18th of June, when they assembled at Westminster for the dispatch of business.

Charles inherited from his father great distress for money, very high notions of the royal prerogative, and a violent attachment to episcopacy. As to his character, he seems to have been obstinate, though not resolute; and therefore, though it was scarce ever possible to make him give up his point, he never could carry on his designs with that spirit which was necessary for their success. In other respects, he appears to have possessed every virtue requisite to constitute the character of a good man. At present believing his subjects to be in perfect friendship with him as he was with them, he resolved that their bounty to him should be entirely unasked, and the genuine effect of mutual confidence and regard. Accordingly, his discourse to the parliament was full of simplicity and cordiality; he lightly mentioned the occasion he had for supply. He employed no intrigue to influence the suffrages of the members. He would not even allow the officers of the crown, who had seats in the house, to mention any particular sum which he had occasion for; but trusted entirely to the wisdom and affection of his parliament, who perfectly well knew his circumstances.

It is almost impossible to read without indignation an account of the return made by the commons to this generous behaviour of their sovereign. They knew that all the money granted by the last parliament had been expended on military and naval preparations; and that great anticipations were likewise made on the revenues of the crown. They were not ignorant that Charles was loaded with a debt contracted by his father, who had borrowed money both from foreign

princes, and from his own subjects. They had learned by experience, that the public revenues could with difficulty maintain the dignity of the crown, even under the ordinary charges of government. They were sensible that the present war was, very lately, the result of their own importunate applications and intreaties, and that they had solemnly engaged to support their sovereign in the management of it. They were acquainted with the difficulty of military enterprises directed against the whole house of Austria; against the king of Spain, possessed of the greatest riches and most extensive dominions of any prince in Europe; against the emperor Ferdinand, hitherto the most fortunate monarch of the age, who had subdued and astonished Germany by the rapidity of his victories. Deep impressions they saw must be made by the British sword, and a vigorous offensive war be waged against these mighty potentates, ere they would resign the palatinate which they had now fully subdued, and which they held in secure possession by its being surrounded with all their other territories. To answer, therefore, all these great and important ends; to satisfy their young king in the first request he made them; to prove their sense of the many royal virtues, particularly economy, with which Charles was endued; the commons thought proper to confer on the king a supply of L. 112,000. To search for the reasons of such an extravagant piece of conduct would be needless; it is impossible they could be good.

It is not to be supposed that Charles, or any person of common sense, could be insensible of such treatment as this; he behaved, however, with great moderation. He represented in the most explicit manner the necessity there was for a large supply: he even condescended to use intreaties: he said that this request was the first he had ever made them; that he was young, and in the commencement of his reign; and if he now met with kind and dutiful usage, it would endear him to the use of parliaments, and would for ever preserve an entire harmony between him and his people. — To these reasons and intreaties, the commons remained inexorable; they even refused the addition of two fifteenths to the former supply. Instead of this, they renewed their ridiculous complaints against the growth of popery, which was now their only grievance. They showed their intolerant spirit by demanding a strict execution of the penal laws against the catholics; and remonstrated against some late pardons granted to priests. They attacked Montague, one of the king's chaplains, on account of a moderate book which he had lately composed, and which, to their great disgust, saved virtuous catholics as well as other Christians from eternal torments. Charles gave them a gracious and com-
plaisant answer; but firmly resolved to abate somewhat of the rigorous laws against that unfortunate party, which his engagements with France absolutely required. No measure, however, throughout the whole reign of this prince, was more disgustful to his bigoted subjects, or by its consequences more fatal to himself than this resolution. The Puritans had continued to gain ground during the whole reign of James, and now formed the majority of the house of commons; in consequence of which, petitions were presented to the king for replacing such *able* clergymen as had been silenced for want of conformity to the ceremonies. They

Britain.

54.
King's reso-
lution to fa-
vour the
Catholics.

⁵⁵ Britain. also enacted laws for the strict observance of Sunday, which they affected to call the *sabbath*, and which they sanctified with the most melancholy indolence; and it is worthy of notice, that the different appellations of *Sunday* and *sabbath* were at that time known symbols of the different parties.—In consequence of this behaviour in Charles's first parliament, it was dissolved on the 12th of August 1625, and a new one called on February 6th 1626.

⁵⁶ Parliament dissolved. His scheme to raise money. During this interval Charles had been obliged to borrow from his subjects on privy-seals; the advantage of which was but a small compensation for the disgust it occasioned. By means, however, of that supply, and some other expedients, he was enabled to equip his fleet, though with difficulty. It was designed against Spain, but performed nothing worth notice, and its bad success increased the clamours against the court.

⁵⁷ Proceedings of his second parliament. Charles's second parliament immediately adopted the same views with the former; however, they voted him a supply of three subsidies (L. 168,000), and three fifteenths; but the passing this vote into a law was reserved until the end of the session, that in the mean time they might have an opportunity of forcing the king to make what concessions they pleased. This harsh and undutiful conduct was greatly resented by Charles; but he found himself obliged to submit, and wait the event with patience. In the mean time they attacked the duke of Buckingham, who was become generally obnoxious; and he was also impeached by the earl of Bristol, on account of his conduct with regard to the Spanish negociation. The earl's impeachment, however, was entirely overlooked, and the commons were able to prove nothing otherwise of any consequence against him. The king imagining that Buckingham's greatest crime was the having been so much in favour with his sovereign, commanded the house expressly not to meddle with his minister and servant, but to finish in a few days the bill they had begun for the subsidies; otherwise they must expect to sit no longer.

⁵⁸ The commons disgusted.

Suggestions of this kind had a bad effect; and when the king proceeded further to throw into prison two members of the house who had managed the impeachment against Buckingham, the commons declared that they would proceed no further in business till they had satisfaction in their privileges. Charles alleged as the reason of this measure, certain seditious expressions, which, he said, had, in their accusation of the duke, dropped from these members. Upon inquiry it appeared that no such expressions had been used, and the members were accordingly released. Soon after, the house of lords, moved by the example of the commons, claimed liberty for the earl of Arundel, who had been lately confined in the tower; and after many fruitless evasions the king was obliged, though somewhat ungracefully, to comply.

The next attack made by the commons would have proved decisive, had it succeeded, and would have reduced the king to an absolute dependence on his parliament. They were preparing a remonstrance against the levying of tonnage and poundage without consent of parliament. This article, together with the new impositions laid on merchandize by James, constituted near one-half of the crown-revenues; and after having gained this point, they were to petition the

king, which then would have been the same thing with commanding him, to remove Buckingham from his presence and councils. The king, however, being alarmed at the yoke they were preparing for him, dissolved his parliament a second time, June 15. 1626.

Charles having thus made such a breach with his parliament as there was no hopes of repairing, was obliged to have recourse to the exercise of every branch of his prerogative in order to supply himself with money. A commission was openly granted to compound with the catholics, and agree for dispensing with the penal laws enacted against them; and by this expedient the king, indeed, filled his coffers, but gave universal disgust to his subjects. From the nobility he desired assistance: from the city he required a loan of L. 100,000. The former contributed slowly: but the latter, covering themselves under many pretences and excuses, gave at last a flat denial. In order to equip a fleet, a distribution by order of the council was made to all the maritime towns; and each of them was required, with the assistance of the adjacent counties, to arm as many vessels as were appointed them. The city of London was rated at 20 ships: and this is the first appearance, in Charles's reign, of ship-money; a taxation which had once been imposed by Elizabeth, but which, when carried some steps farther by Charles, produced the most violent discontents.—These methods of supply were carried on with some moderation, till news arrived of the king of Denmark being totally defeated by count Tilly the imperial general; but money then becoming more than ever necessary, it was suggested in council, that the most speedy, equal, and convenient method of supply was by a general loan from the subject, according as every man was assessed in the rolls of the last subsidy. That precise sum was required which each would have paid, had the vote of four subsidies been passed into a law: care, however, was taken, that the sums thus exacted were not to be called subsidies but loans; but it was impossible to avoid observing, that thus the liberty of the subject was entirely destroyed, and all parliaments rendered at once superfluous.

Many people throughout England refused these loans, and some were even active in encouraging their neighbours to insist upon their common rights and privileges. By warrant of the council, these were thrown into prison. Most of them patiently submitted to confinement, or applied by petition to the king, who commonly released them. Five gentlemen, however, Sir Thomas Darnel, Sir John Corbet, Sir Walter Earl, Sir John Heweningham, and Sir Edmond Hambden, demanded release, not as a favour from the court, but as their due by the laws of their country. No particular cause was assigned for their commitment. The special command of the king and council alone was pleaded. And it was alleged, that by law this was not sufficient reason for refusing bail or releasement to the prisoners. The question was brought to a solemn trial before the court of king's bench; and the whole kingdom was attentive to the issue of the cause. By the debates on this subject it appeared, that personal liberty had been secured by no less than six different statutes, and by an article in magna charta itself. It appeared, that, in times of turbulence and sedition, the princes infringed upon these laws; and of this also many examples were produced. The difficulty then lay

Britain.
⁵⁹ Parliament dissolved.

⁶⁰ Ship-money.

⁶¹ A general loan required.

⁶² Five gentlemen resolved to stand trial.

Britain. to determine when such violent measures were necessary; but of that the court pretended to be the supreme judge. As it was legal, therefore, that these five gentlemen should plead the statute, by which they might demand bail, so it was expedient in the court to remand them to prison, without determining on the necessity of taking bail for the present. This was a cruel evasion of justice; and, in fact, satisfied neither party. The court insisted that no bail could be taken; the country exclaimed that the prisoners ought to be set free.

63
War declared against France.

While the king was thus embroiled with his parliament at home, and with powerful nations abroad, he rashly engaged in a war with France, a kingdom with which he had but lately formed the most natural alliance. All historians agree that this war proceeded from the rivalry of the duke of Buckingham and cardinal Richelieu; both of whom were in love with the queen of France; and an inveterate enmity being thus produced between these favourites, they resolved to involve their respective nations in the dispute. However this be, war was declared against France; and Charles was taught to hope, that hostilities with that kingdom would be the surest means of procuring tranquillity at home.—The success of this war was proportionable to the wisdom with which it was commenced. Buckingham was appointed commander; and he being entirely unacquainted both with sea and land service, managed matters so ill, that he lost two-thirds of his army, and returned in total discredit both as an admiral and general.

64
Bad success of Buckingham.

The discontents in England now rose to such an height, that there was reason to apprehend an insurrection or rebellion. Charles was also reduced to the greatest distress for want of money. That which he had levied by virtue of his prerogative came in very slowly, and it was dangerous to renew the experiment on account of the ill humour of the nation in general.

65
A third parliament called.

A third parliament therefore was called, March 17th 1628; whom Charles plainly told at the beginning of the session, that "if they should not do their duties, in contributing to the necessities of the state, he must, in discharge of his conscience, use those other means which God had put into his hands, in order to save that which the follies of some particular men might otherwise put in danger." This parliament behaved in a much more reasonable manner than either of the two former ones. The nation was now really aggrieved by the late arbitrary proceedings. They began with voting against arbitrary imprisonments and forced loans; after which, five subsidies (280,000*l.*) were voted to the king. With this sum, though much inferior to his wants, Charles declared himself well satisfied; and even tears of affection started in his eye when informed of this concession: the commons, however, resolved not to pass this vote into a law, before they had obtained from the king a sufficient security that their liberties should be no longer violated as they had formerly been. They resolved to frame a law, which they were to call a *petition of right*, in which they should collect all the arbitrary exertions of the prerogative which Charles had exposed to their view, and these they were to assault at once by their petition. The grievances now complained of were, forced loans, benevolences, taxes without consent of parliament, arbitrary imprisonments, billeting soldiers, and martial law. They pretended not, as they

66
Petition of right framed.

to determine when such violent measures were necessary; affirmed, to any unusual power or privileges; nor did they intend to infringe the royal prerogative in any respect: they aimed only at securing those rights and privileges derived from their ancestors.

Britain. affirmed, to any unusual power or privileges; nor did they intend to infringe the royal prerogative in any respect: they aimed only at securing those rights and privileges derived from their ancestors.

67

The king, on his part, now began plainly to show, that he aimed at nothing less than absolute power. This reasonable petition he did his utmost to evade, by repeated messages to the house, in which he always offered his royal word that there should be no more infringements on the liberty of the subject. These messages, however, had no effect on the commons: they knew how insufficient such promises were, without further security; and therefore the petition at last passed both houses, and nothing was wanting but the royal assent to give it the force of a law. The king accordingly came to the house of peers, sent for the commons, and being seated in the chair of state, the petition was read to him. In answer to it, he said, "The king will-eth, that right be done according to the laws and customs of the realm, and that the statutes be put into execution; that his subjects may have no cause to complain of any wrong or oppression contrary to their just rights and liberties, to the preservation whereof he holds himself in conscience as much obliged as of his own prerogative."

Duplicity of the king.

This equivocal answer was highly resented. The commons returned in very ill humour. Their indignation would undoubtedly have fallen on the unfortunate catholics, had not their petition against them already received a satisfactory answer. To give vent to their present wrath, therefore, they fell on Dr Manwaring, who had preached a sermon, and, at the special command of the king, printed it; which was now found to contain doctrines subversive of all civil liberty. It taught, that though property was commonly lodged in the subject, yet, whenever any exigency required supply, all property was transferred to the sovereign; that the consent of parliament was not necessary for the imposition of taxes; and that the divine laws required compliance with every demand, however irregular, which the prince should make upon his subjects. For these doctrines Manwaring was sentenced to be imprisoned during the pleasure of the house; to be fined 1000*l.* to the king; make submission and acknowledgment for his offence; be suspended three years; be incapable of holding any ecclesiastical dignity or secular office; and that his book be called in and burnt. No sooner, however, was the session ended, than Manwaring received a pardon, and was promoted to a living of considerable value. Some years afterwards he was promoted to the see of St Asaph. At last, the king, seeing it was impossible to carry his point, yielded to the importunities of parliament. He came to the house of peers, and pronouncing the usual form of words, "Let it be law as is desired," gave full sanction and authority to the petition. The house resounded with acclamations, and the bill for five subsidies immediately passed.

68

The commons, however, were not yet satisfied; they began again to attack Buckingham, against whom they were implacable: they also asserted, that the levying of tonnage and poundage without consent of parliament was a palpable violation of the ancient liberties of the people, and an open infringement of the petition of right so lately granted. The king, in order to prevent a re-

69

Parliament prorogued.

Britain.
70
Buckingham murdered.

monstrance on that subject, suddenly prorogued the parliament, on June 26th, 1628.

The commons soon got rid of their enemy Buckingham; who was murdered on the 23d of August this same year, by one Felton who had formerly served under him as a lieutenant. The king did not appear much concerned at his death, but retained an affection for his family throughout his whole lifetime. He desired also that Felton might be tortured, in order to extort from him a discovery of his accomplices; but the judges declared, that though that practice had been formerly very common, it was altogether illegal.

71
Contentions about tonnage and poundage.

In 1629, the usual contentions between the king and his parliament continued. The great article on which the commons broke with their sovereign, and which finally created in him a disgust at all parliaments, was their claims with regard to tonnage and poundage. The dispute was, whether this tax could be levied without consent of parliament or not. Charles, supported by multitudes of precedents, maintained that it might; and the parliament, in consequence of their petition of right, asserted that it could not. The commons were resolved to support their rights: and the disputes concerning tonnage and poundage went hand in hand with some theological controversies; particularly concerning Arminianism, which the Puritans, who now formed the majority of the nation, opposed with the greatest violence; and which consequently crept in among those who professed episcopacy, where it hath still maintained its ground more than in any other party.

The commons began with summoning before them the officers of the custom-house, to give an account by what authority they had seized the goods of those merchants who had refused to pay the duties of tonnage and poundage. The barons of exchequer were questioned with regard to their decrees on that head. The sheriff of London was committed to the Tower for his activity in supporting the officers of the custom-house. The goods of Rolles, a merchant, and member of the house, being seized for his refusal to pay the duties, complaints were made of this violence, as if it were a breach of privilege. Charles, on the other hand, supported his officers in all these measures, and the quarrel between him and the commons became every day higher. Sir John Elliot framed a remonstrance against tonnage and poundage, which he offered to the clerk to read; but it was refused, and he then read it himself. The question being called for, Sir John Finch the speaker said, that he had a command from the king to adjourn, and to put no question; upon which he rose and left the chair. The whole house was in an uproar; the speaker was pushed back into the chair, and forcibly held in it, till a short remonstrance was formed, which was instantaneously passed by almost universal acclamation. Papists and Arminians were now declared capital enemies to the commonwealth. Those who levied tonnage and poundage were branded with the same epithet. And even the merchants, who should voluntarily pay these duties, were declared betrayers of English liberty, and public enemies. The doors being locked, the gentleman-usher of the house of lords, who was sent by the king, could get no admittance till this remonstrance was finished. By the king's order he took the mace from the table, which put an end to their pro-

72
Parliament dissolved.

ceedings, and on the 10th of March the parliament was dissolved. Some of the members were imprisoned and fined; but this severity served only to increase the general discontent, and point out the sufferers as proper leaders for the popular party.

Charles being now disgusted with parliaments, resolved to call no more; but finding himself destitute of resources, was obliged to make peace with the two powers with which he was at war. A treaty was signed with France on the 14th of April, and another with Spain on the 5th of November 1630, by which Charles bound himself to observe a neutrality with regard to the affairs on the continent. His conduct to his subjects cannot now appear entirely blameless, nor the general discontent altogether without foundation. As if, however, he had resolved to ruin himself, and to lose the small degrees of affection which remained among his subjects, Charles now began to set about making innovations in religion. Archbishop Laud had obtained a prodigious ascendancy over the king; and, by his superstitious attachment to foolish ceremonies, led him into a conduct that proved fatal to himself and to the kingdom in general. The humour of the nation ran at that time in a channel perfectly the reverse of superstition. The ancient ceremonies which had been sanctified by the permission and practice of the first reformers, could scarce be retained in divine service. Laud chose this time, of all others the most improper, for renewing the ceremonies of the fourth and fifth century, when the Christian church, as is well known, was sunk into those superstitions which were afterwards continued and augmented by the policy of the church of Rome. So openly were these tenets espoused, that not only the discontented Puritans believed the church of England to be relapsing fast into the Romish superstition, but the court of Rome itself entertained hopes of regaining its authority in this island. To forward Laud's good intentions, an offer was twice made him, in private, of a cardinal's hat; which he declined accepting. His answer was (as he says himself), that "something dwelt within him which would not suffer his compliance till Rome was other than it is." It must be confessed, however, that though Laud deserved not the appellation of a *Papist*, the genius of his religion was, though in a less degree, the same with that of the Romish. The same profound respect was exacted to the sacerdotal character; the same submission to the creeds and decrees of synods and councils required; the same pomp and ceremony was affected in worship; and the same superstitious regard to days, postures, meats, and vestments. Orders were given, and rigorously insisted on, that the communion-table should be removed from the middle of the area where it had hitherto stood in all churches except cathedrals. It was placed at the east end, railed in, and denominated an *altar*; as the clergyman who officiated commonly received the appellation of *priest*. All kinds of ornaments, especially pictures, were introduced. Some of these, upon inquiry, were found to be the very same that were to be met with in the mass-book. The crucifix too, that perpetual consolation of all pious Catholics, and terror to all sound Protestants, was not forgot on this occasion.

In return for Charles's indulgence towards the church, Laud and his followers took care to magnify on

Britain.
73
Peace with France and Spain.

74
The king attempts to introduce new religious ceremonies.

Britain.

on every occasion the regal authority, and to treat with the utmost disdain or detestation all puritanical pretensions to a free and independent constitution. From this subjection, however, they took care to exclude themselves, and insisted upon a divine and apostolical charter in preference to a legal and parliamentary one. The sacerdotal character was magnified as sacred and indefeasible; all right to spiritual authority, or even to private judgment in spiritual subjects, was refused to profane laymen: ecclesiastical courts were held by bishops in their own name, without any notice taken of the king's authority: and Charles, though extremely jealous of every claim in popular assemblies, seemed rather to encourage than repress those encroachments of his clergy.

75
His arbitrary and unpopular government.

The principles which exalted prerogative were put in practice during the whole time that Charles ruled without parliaments. He wanted money for the support of government; and he levied it, either by the revival of obsolete laws, or by violations of the privileges. Though humane and gentle in his nature, he gave way to severities in the star-chamber and high commission, which seemed necessary in order to support the present mode of administration, and suppress the rising spirit of liberty throughout the kingdom. Tonnage and poundage were continued to be levied by royal authority alone. The former arbitrary impositions were still exacted; and even new impositions laid upon different kinds of merchandize. The custom-house officers received orders from the council to enter into any house, warehouse, or cellar; to search any trunk or chest; and to break any bulk whatever, in default of the payment of customs. In order to exercise the militia, each county by an edict of the council was assessed in a certain sum for maintaining a muster-master appointed for that service. Compositions were openly made with recusants, and the Popish religion became a regular part of the revenue. A commission was granted for compounding with such as were possessed of crown-lands on defective titles; and on this pretence some money was exacted of the people, &c.

76
He attempts to establish episcopacy in Scotland.

While the English were in the utmost discontent, and almost ready to break out in open rebellion by these arbitrary proceedings, Charles thought proper to attempt setting up episcopacy in Scotland. The canons for established ecclesiastical jurisdiction were promulgated in 1635, and were received without much appearance of opposition; yet with great inward apprehension and discontent. The first reading of the liturgy was attempted in the cathedral church of St Giles in Edinburgh, in 1637; but this produced such a tumult, that it was not thought safe to repeat the experiment. An universal combination against the religious innovations began immediately to take place; but Charles, as if obstinately bent on his own destruction, continued inflexible in his purpose, though he had nothing to oppose to the united force of the kingdom but a proclamation, in which he pardoned all past offences, and exhorted the people to be more obedient for the future, and to submit peaceably to the use of the liturgy. This proclamation hastened forward the insurrection which had been slowly advancing before. Four tables, as they were called, were formed in Edinburgh. One consisted of nobility, another of gentry, a third of ministers, and the fourth of burghesses.

77
Which occasions an insurrection.

The table of gentry was divided into many subordinate ones, according to the different counties. In the hands of the four tables, the authority of the whole kingdom was placed. Orders were issued by them, and every where obeyed with the utmost regularity; and among the first acts of their government was the production of the COVENANT.

This famous covenant consisted of a renunciation of Popery, formerly signed by James in his youth, and filled with many virulent invectives against that party. A bond of union followed, by which the subscribers obliged themselves to resist all religious innovations, and to defend each other against all opposition whatsoever: And all this for the greater glory of God, and the greater honour and advantage of their king and country. The covenant was subscribed by people of all ranks and conditions. Few disapproved of it in their hearts, and still fewer dared openly to condemn it. The king's ministers and counsellors themselves were mostly of the same way of thinking; and none but rebels to God, and traitors to their country, it was thought, would withdraw themselves from so salutary and pious a combination.

The king now began to be alarmed. He sent the marquis of Hamilton, as commissioner, with authority to treat with the covenanters. He required the covenant to be renounced and recalled; and he thought that on his part he made very satisfactory concessions, when he offered to suspend the canons and liturgy till in a fair and legal way they could be received, and so to model the high commission that it should no longer give offence to his subjects. In answer to this demand the covenanters told him, they would sooner renounce their baptism; and invited the commissioner himself to sign it. Hamilton returned to London; made another fruitless journey with new conclusions to Edinburgh; returned again to London, and was immediately sent back with still more satisfactory concessions. The king was now willing to abolish entirely the canons, the liturgy, and the high commission court; he even resolved to limit extremely the power of the bishops, and was content if on any terms he could retain that order in the church of Scotland. And to ensure all these gracious offers, he gave Hamilton authority to summon first an assembly, and then a parliament, where every national grievance should be redressed.—These successive concessions only showed the weakness of the king, and encouraged the malcontents to rise in their demands. The offer, however, of an assembly and a parliament, in which they expected to be entirely masters, was very willingly embraced by the covenanters.

Charles, perceiving what advantage his enemies had reaped from their covenant, resolved to have a covenant also on his side; and he ordered one to be drawn up for that purpose. It consisted of the same violent renunciation of Popery with the other; which, though the king did not approve of it, he thought proper to adopt, in order to remove all the suspicions entertained against him. As the covenanters, in their bond of mutual defence against all opposition, had been careful not to except the king; Charles had formed a bond which was annexed to this renunciation, and which expressed the subscribers loyalty and duty to his majesty. But the covenanters perceiving that this new covenant was only meant to weaken and divide them,

Britain.

78

Account of the covenant.

79

Charles attempts to appease the covenanters.

80

Covenant entered into by the royalists.

Britain. them, received it with the utmost scorn and detestation. And, without delay, they proceeded to model the assembly from which such great achievements were expected,

81
Violent
proceedings
of the as-
sembly.

The assembly met at Glasgow in 1638. A firm determination had been entered into of utterly abolishing episcopacy; and, as a preparative to it, there was laid before the presbytery of Edinburgh, and solemnly read in all the churches of the kingdom, an accusation against the bishops, as guilty, all of them, of heresy, simony, bribery, perjury, cheating, incest, adultery, fornication, common swearing, drunkenness, gaming, breach of the sabbath, and every other crime which had occurred to the accusers. The bishops sent a protest, declining the authority of the assembly; the commissioner too protested against that court, as illegally constituted and elected; and, in his majesty's name, dissolved it. This measure was foreseen, and little regarded. The court still continued to sit and do business. All the acts of assembly, since the accession of James to the crown of England, were, upon pretty reasonable grounds, declared null and invalid. The acts of parliament which affected ecclesiastical affairs were on that very account supposed to have no authority. And thus the whole fabric which James and Charles, in a long course of years, had been rearing with much care and policy, fell at once to the ground. The covenant likewise was ordered to be signed by every one, under pain of excommunication.

82
Prepara-
tions for
war by the
covenanters

In 1639, the covenanters prepared in earnest for war. The earl of Argyle, though he long seemed to temporize, at last embraced the covenant; and he became the chief leader of that party. The earls of Rothes, Cassils, Montrose, Lothian, the lords Lindesay, Loudon, Yester, and Balmerino, also distinguished themselves. Many of their officers had acquired reputation in the German wars, particularly under Gustavus; and these were invited over to assist their country in their present necessity. The command was entrusted to Lesly, a soldier of experience and ability. Forces were regularly enlisted and disciplined. Arms were commissioned and imported from foreign countries. A few castles which belonged to the king, being unprovided of victuals, ammunition, and garrisons, were soon seized. And the whole country, except a small part, where the marquis of Huntly still adhered to the king, being in the covenanters hands, was soon put into a tolerable posture of defence.

83
By the king.

Charles, on the other hand, was not deficient in his endeavours to oppose this formidable combination. By regular economy he had not only paid all the debts contracted in the French and Spanish wars, but had amassed a sum of L. 200,000; which he had reserved for any sudden exigency. The queen had great interest with the catholics, both from the sympathy of religion, and from the favours and indulgences which she had been able to procure them. She now employed her credit, and persuaded them, that it was reasonable to give large contributions, as a mark of their duty to the king, during this urgent necessity: And thus, to the great scandal of the Puritans, a considerable supply was gained. The king's fleet was formidable and well supplied. Having put 5000 land forces on board, he intrusted it to the marquis of Hamilton, who had orders to sail to the frith of Forth, and cause a diver-

sion in the forces of the malcontents. An army was levied of near 20,000 foot and 3000 horse; and was put under the command of the earl of Arundel, a nobleman of great family, but celebrated neither for military nor political abilities. The earl of Essex, a man of strict honour, and extremely popular, especially among the soldiery, was appointed lieutenant-general: The earl of Holland was general of the horse. The king himself joined the army, and he summoned all the peers of England to attend him. The whole had the appearance of a splendid court rather than a military armament, and in this situation the camp arrived at Berwick.

The Scottish army was equally numerous with that of the king, but inferior in cavalry. The officers had more experience; and the soldiers, though ill disciplined and armed, were animated, as well as by the national aversion to England, and the dread of becoming a province to their old enemy, as by that religious enthusiasm which was the occasion of the war. Yet so prudent were their leaders, that they immediately sent very submissive messages to the king, and craved leave to be admitted to a treaty.—Charles, as usual, took the worst course. He concluded a sudden pacification, in which it was stipulated, that he should withdraw his fleet and army; that within 48 hours the Scots should dismiss their forces; that the king's forts should be restored to him; his authority be acknowledged; and a general assembly and parliament be immediately summoned, in order to compose all differences.

This peace was of no long duration. Charles could not prevail on himself to abandon the cause of episcopacy, and secretly intended to seize every favourable opportunity to recover the ground he had lost. The assembly, on the other hand, proceeded with the utmost fury and violence. They voted episcopacy to be unlawful in the church of Scotland: they stigmatized the canons and liturgy as popish: they denominated the high commission tyranny. The parliament, which sat after the assembly, advanced pretensions which tended to diminish the civil power of the monarch; and, what probably affected Charles still more, they were proceeding to ratify the acts of assembly, when by the king's instructions Traquair the commissioner pro-rogued them. And on account of these claims, which might have been easily foreseen, war was recommenced the same year.

No sooner had Charles concluded the peace, than he found himself obliged to disband his army, on account of his want of money; and as the soldiers had been held together merely by mercenary views, it was not possible, without great trouble, expence, and loss of time, to reassemble them. On the contrary, the covenanters, in dismissing their troops, had been careful to preserve nothing but the appearance of a pacification. The officers had orders to be ready on the first summons: The soldiers were warned not to think the nation secure from an English invasion: And the religious zeal which animated all ranks of men made them immediately fly to their standards, as soon as their trumpet was sounded by their spiritual and temporal leaders.

In 1640, however, the king made shift to draw an army together; but finding himself unable to support them, was obliged to call a parliament after an inter-

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84
Peace con-
cluded.

85
War again
declared.

86
A parlia-
ment called.

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87 Dissolved. The king accordingly insisted for money, and the parliament on their grievances, till a dissolution ensued. — To add to the unpopularity of this measure, the king, notwithstanding his dissolving the parliament, allowed the convocation to sit; a practice of which, since the reformation, there had been very few examples, and which was now by many deemed very irregular. Besides granting to the king a supply from the spirituality, the convocation, jealous of innovations similar to those which had taken place in Scotland, imposed an oath on the clergy and the graduates in the universities, by which every one swore to maintain the established government of the church, by archbishops, bishops, deans, chapters, &c. These steps were deemed illegal, because not ratified by consent of parliament; and the oath, containing an *Et*. in the middle of it, became a subject of general ridicule.

88 Charles distressed for money. The king disappointed of parliamentary subsidies, was obliged to have recourse to other expedients. The ecclesiastical subsidies served him in some stead; and it seemed but just that the clergy should contribute to the expence of a war which had been in a great measure of their own raising. He borrowed money from his ministers and courtiers; and so much was he beloved among them, that above 300,000*l.* were subscribed in a few days. Some attempts were made towards forcing a loan from the citizens; but still repelled by the spirit of liberty, which was now become unconquerable. A loan of 40,000*l.* was extorted from the Spanish merchants who had bullion in the tower. Coat and conduct money for the soldiery was levied on the counties; an ancient practice, but which was supposed to be abolished by the petition of right. All the pepper was bought from the East India Company upon trutt; and sold, at a great discount, for ready money. A scheme was proposed for coining two or three hundred thousand pounds of base money. Such were the extremities to which Charles was reduced. The fresh difficulties, which amidst the present distresses were every day raised, with regard to the payment of ship-money, obliged him to exert continual acts of authority, augmented extremely the discontents of the people, and increased his indigence and necessities.

The present expedients, however, enabled the king, though with great difficulty, to march his army, consisting of 19,000 foot and 2000 horse. The earl of Northumberland was appointed general; the earl of Strafford, who was called over from Ireland, lieutenant-general; lord Conway, general of the horse. A small fleet was thought sufficient to serve the purposes of this expedition. The Scots, though somewhat superior, were sooner ready than the king's army, and marched to the borders of England. Notwithstanding their warlike preparations and hostile attempts, the covenanters still preserved the most submissive language to the king; and entered England with no other design, they said, than to obtain access to the king's presence, and lay their humble petition at his royal feet. At Newburn upon Tyne they were opposed by a detachment of 4500 men

89 Royalists defeated at Newburn.

under Conway, who seemed resolute to dispute with them the passage of the river. The Scots first intreated them, with great civility, not to stop them in their march to their gracious sovereign; and then attacked them with great bravery, killed several, and chased the rest from their ground. Such a panic seized the whole English army, that the forces at Newcastle fled immediately to Durham; and not yet thinking themselves safe, they deserted that town, and retreated into Yorkshire.

The Scots continued to advance; they dispatched messengers to the king, who was now arrived at York. They took care, after the advantage they had gained, to redouble their expressions of loyalty, duty, and submission to his person; and they even made apologies full of sorrow and contrition for their late victory. Charles was in a very distressed condition; and, in order to prevent the further advance of the Scots, agreed to a treaty, and named 16 English noblemen to meet with 11 Scots commissioners at Rippon. Strafford, upon whom, by reason of Northumberland's sickness, the command of the army had devolved, advised Charles rather to put all to hazard, than submit to such unworthy terms as he saw would be imposed upon him. He advised him to push forward and attack the Scots, and bring the affair to a quick decision; and if he was ever so unsuccessful, nothing worse could befall him than what from his inactivity he would certainly be exposed to; and, to show how easily this project might be executed, he ordered an assault to be made on some quarters of the Scots, and gained an advantage over them. This salutary advice Charles had not resolution to follow. He therefore resolved to call a council of the peers; and as he foresaw that they would advise him to call a parliament, he told them in his first speech, that he had already taken that resolution. In order to subsist both armies (for the king was obliged to pay his enemies, in order to save the northern counties), Charles wrote to the city, desiring a loan of 200,000*l.* And the peers at York, whose authority was now much greater than that of their sovereign, joined in the same request.

90 The parliament met November 3d 1640: the house of commons had never been observed so numerous; and, **meets.** that they might strike a decisive blow at once against the court, they began with the impeachment of the earl of Strafford. That nobleman, who was considered as **91** prime minister, both on account of the credit he possessed with his master, and his own uncommon vigour and **Unhappy situation of Strafford.** capacity, had now the misfortune of having incurred the hatred of all the three kingdoms. The Scots looked upon him as the capital enemy of their country. He had engaged the parliament of Ireland to advance large subsidies to be employed in a war against them: he had levied an army of 9000 men, with which he had menaced all their western coast: he had obliged the Scots, who lived under his government to renounce the covenant, &c.: he had governed Ireland, first as deputy, and then as lord-lieutenant, during eight years, with great vigilance, activity, and prudence, but with very little popularity. In a nation so averse to the English government and religion, these very virtues were sufficient to draw on him the public hatred. His manners, besides, were at bottom haughty, rigid, and severe; and no sooner did adversity begin to seize him, than the concealed

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cealed aversion blazed up at once, and the Irish parliament used every expedient to aggravate the charge against him.

The universal discontent which prevailed throughout the English nation was all pointed against the earl of Strafford; though for no other reason but because he was the minister of state whom the king most favoured and trusted. His extraction was honourable, his paternal fortune considerable: yet envy attended his sudden and great elevation; and his former associates in popular counsels, finding that he owed his advancement to the desertion of their cause, represented him as the great apostate of the commonwealth, whom it behoved them to sacrifice as a victim to public justice.

92
Unjustly
executed.

93
Distress of
the king on
account of
his execu-
tion.

From so terrible a combination against a single person, nothing else could be expected than what really happened. Strafford was impeached, most unjustly condemned, and at last executed, in the year 1641. It was not without extreme difficulty that the king could be brought to consent to his execution. He came to the house of lords, where he expressed his resolution never to employ Strafford again in any public business; but with regard to the treason for which he was condemned, he professed himself totally dissatisfied. The commons voted it a breach of privilege for the king to take notice of any bill depending before the house. Charles did not perceive, that his attachment to Strafford was the chief motive for the bill; and the greater proof he gave of this attachment to his favourite minister, the more inevitable did he render his destruction. The house of lords were intimidated, by popular violence, into passing the bill of attainder against the unfortunate earl. The same battery was next employed to force the king's assent. The populace flocked about Whitehall, and accompanied their demand of justice with the loudest clamours and most open menaces. A thousand idle reports of conspiracies, insurrections, and invasions, were spread abroad. On whatever side the king cast his eyes, he saw no resource nor security. All his servants, consulting their own safety rather than their master's honour, declined interposing with their advice between him and his parliament. The queen, terrified at the appearance of so great danger, pressed Charles, with tears, to satisfy his people in this demand, which it was hoped would finally content them. Archbishop Juxon alone had the courage to advise him, if he did not approve of the bill, by no means to consent to it.

94
Charles
renders the
parliament
perpetual.

Strafford, hearing of the king's irresolution and anxiety, wrote to him a letter, in which he desired his own execution, in order to give peace to the nation: and at last, after the most violent anxiety and doubt, Charles granted a commission to four noblemen, in his name, to give the royal assent to the bill; flattering himself, perhaps, that as neither his will consented to the deed, nor was his hand immediately engaged in it, he was the more free from all the guilt which attended it. These commissioners he empowered at the same time to give his assent to a bill yet more fatal to himself, viz. That the present parliament should not be dissolved, prorogued, or adjourned, without their own consent.

By this last bill Charles rendered the power of his enemies perpetual, as it was already uncontrollable. The reason of this extraordinary step was, that the

commons, from policy, more than necessity, had embraced the expedient of paying the two armies by borrowing money from the city. These loans they repaid afterwards by taxes levied on the people. At last the citizens, either of themselves, or by suggestion, began to start difficulties with regard to a farther loan which was demanded. "We make no scruple of trusting the parliament (said they), were we certain that the parliament was to continue till our repayment. But, in the present precarious situation of affairs, what security can be given us for our money?" In order to obviate this objection, the abovementioned bill was suddenly brought in, and having passed both houses with great rapidity, was at last brought to the king; who, being oppressed with grief on account of the unhappy fate of Strafford, did not perceive the pernicious consequence of the bill.

All this time the commons had ruled in other respects with an uncontrollable sway. Soon after the impeachment of Strafford, Laud was accused of high treason, and committed to custody. To avoid the like fate, ⁹⁶ <sup>Laud im-
prisoned.</sup> lork keeper Finch and secretary Windebank fled, the one into Holland, the other into France. The house instituted a new species of guilt, termed *delinquency*: ⁹⁷ <sup>New crime
of delin-
quency.</sup> those who had exercised the powers necessary for the defence of the nation during the late military operations, were now called *delinquents*. In consequence of this determination, many of the nobility and prime gentry of the nation, while only exerting, as they justly thought, the legal powers of magistracy, found themselves unexpectedly involved in this new crime of delinquency. The commons, however, by their institution, reaped this multiplied advantage; they disarmed the crown, they established the maxims of rigid law and liberty, and they spread the terror of their own authority. All the sheriffs who had formerly exacted ship money, though by the king's express command, were now declared delinquents. The farmers and officers of the customs who had been employed during so many years in levying tonnage, poundage, &c. were likewise denominated criminals of the same kind, and were afterwards glad to compound for a pardon, by paying 150,000 l. Every discretionary or arbitrary sentence of the star-chamber and high commission courts, which from their very nature were arbitrary, underwent a severe scrutiny; and all those who had concurred in such sentences, were voted to be liable to the penalties of law. No minister of the king, no member of the council, but what found himself exposed by this determination. The judges who had formerly given judgment against Hambden for refusing to pay ship-money, were accused before the peers, and obliged to find security for their appearance. Berkley, a judge of the king's bench, was seized by order of the house, even when sitting in his tribunal. The sanction of the lords and commons, as well as that of the king, was declared necessary for the confirmation of ecclesiastical canons. Monopolists and projectors, if of the king's party, were now expelled the house; but one Mildmay, a notorious monopolist, was allowed to keep his seat, because he ⁹⁸ <sup>Partiality
and injus-
tice of the
parliament.</sup> was of the popular party. In short, the constitution was completely new-modelled; and during the first period of the transactions of this remarkable parliament, if we except Strafford's attainder, their merits in other respects so much overbalance their mistakes, as to in-
title

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title them to very ample praises from all lovers of liberty. Not only were former abuses remedied, and grievances redressed; great provision for the future was made by excellent laws against the return of the like complaints. And if the means by which they obtained such mighty advantages favoured often of artifice, sometimes of violence; it is to be considered, that revolutions of government cannot be effected by mere force of argument and reasoning; and that, factions being once excited, men can neither so firmly regulate the tempers of others, nor their own, as to ensure themselves against all exorbitancies.

Had the parliament stopped here, it had been happy for the nation; but they were now resolved to be satisfied with nothing less than the total abolition of monarchy. The king had promised to pay a visit, this summer, to his subjects in Scotland, in order to settle their government; and though the English parliament was very importunate with him to lay aside that journey, they could not prevail with him so much as to delay it. Having failed in this, they appointed a small committee of both houses to attend him, in order, as was pretended, to see the articles of pacification executed, but really to be spies upon the king, to extend still farther the ideas of parliamentary authority, as well as eclipse his majesty. Endeavours were even used, before Charles's departure, to have a protector of the kingdom appointed, with a power to pass laws without having recourse to the king. About this time, the king concluded the marriage of the princess Mary with William prince of Orange. He did not conclude this alliance without communicating his intentions to parliament, who were very well satisfied with the proposal. They adjourned from Sept. 9th to October 20th, 1641.

99
Marriage
of the prin-
cess Mary
with the
prince of
Orange.

100
Charles ar-
rives in
Scotland.

101
His great
concessions.

Charles arrived in Scotland August 14th 1641, with a design to give full satisfaction if possible to this restless kingdom. Some good regulations were made; the bench of bishops, and lords of articles, were abolished; it was ordained that no man should be created a Scottish peer, who possessed not 10,000 marks (above 500 l.) of annual rent in the kingdom; a law for triennial parliaments was likewise enacted; and it was ordained, that the last act of every parliament should be to appoint the time and place for holding the parliament next ensuing; the king was also deprived of that power formerly exercised, of issuing proclamations which enjoined obedience under the penalty of treason. But the most fatal blow given to royal authority, and what in a manner dethroned the prince, was an article, that no member of the privy-council, in whose hands, during the king's absence, the whole administration lay, no officer of state, none of the judges, should be appointed but by advice and approbation of parliament. Charles even agreed to deprive of their seats four judges who had adhered to his interests; and their place was supplied by others more agreeable to the ruling party. Several of the covenanters were also sworn of the privy-council; and all the ministers of state, counsellors and judges, were, by law, to hold their places during life or good behaviour. The king, while in Scotland, conformed himself to the established church; he bestowed pensions and preferments on Henderson, Gillespy, and other popular preachers; he practised every art to soften, if not to gain, his greatest enemies; the earl of Argyle was created a marquis, Lord London

an earl, and Lesly was dignified with the title of *Lord Leven*. But though Charles was thus obliged to heap favours on his enemies and overlook his friends, the former were not satisfied, as believing all he did proceeded from artifice and necessity; while some of the latter were disgusted, and thought themselves ill rewarded for their past services.

Argyle and Hamilton, being seized with an apprehension, real or pretended, that the earl of Crawford and others meant to assassinate them, left the parliament suddenly, and retired into the country: but, upon invitation and assurances, returned in a few days. This event, which in Scotland had no visible consequence, was commonly denominated the *incident*; but though the incident had no effect in Scotland, it was attended with very serious consequences in England. The English parliament immediately took the alarm; English or rather probably were glad of the hint: they insinuated to the people, that the *malignants*, so they called the king's party, had laid a plot at once to murder them and all the godly in both kingdoms. They applied therefore to Essex, whom the king had left general of the south of England; and he ordered a guard to attend them.

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In the mean time a most dangerous rebellion broke out in Ireland, with circumstances of unparalleled horror, bloodshed, and devastation. The old Irish, by the wise conduct of James, had been fully subdued, and proper means taken for securing their dependence and subjection for the future; but their old animosity still remained, and only wanted an occasion to exert itself. This they obtained from the weak condition to which Charles was reduced, and this was made use of in the following manner.

103
Rebellion
breaks out
in Ireland.

One Roger More, a gentleman descended from an ancient Irish family, but of narrow fortune, first formed the project of expelling the English, and asserting the independency of his native country. He secretly went from chieftain to chieftain, and roused up every latent principle of discontent. He maintained a close correspondence with lord Macguire and Sir Phelim O'Neale, the most powerful of the old Irish; and by his persuasions soon engaged not only them, but the most considerable persons of the nation, into a conspiracy; and it was hoped, the English *of the pale*, as they were called, or the old English planters, being all catholics, would afterwards join the party which restored their religion to its ancient splendor and authority. The plan was, that Sir Phelim O'Neale, and the other conspirators, should begin an insurrection on one day throughout the provinces, and should attack all the English settlements; and that, on the very same day, lord Macguire and Roger More should surprise the castle of Dublin. They fixed on the beginning of winter for the commencement of this revolt; that there might be more difficulty in transporting forces from England. Succours to themselves, and supplies of arms, they expected from France, in consequence of a promise made them by cardinal Richelieu; and many Irish officers who had served in the Spanish troops had given assurances of their concurrence, as soon as they saw an insurrection entered upon by their Catholic brethren. News, which every day arrived from England, of the fury expressed by the commons against all Papists, struck fresh terror into the Irish nation, stimu-

lated

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lated the conspirators to execute their fatal purpose, and assured them of the concurrence of their countrymen.

Such a propensity was discovered in all the Irish to revolt, that it was deemed unnecessary as well as dangerous to trust the secret in many hands; and though the day appointed drew nigh, no discovery had yet been made to government. The king, indeed, had received information from his ambassadors, that something was in agitation among the Irish in foreign parts; but though he gave warning to the administration in Ireland, his intelligence was entirely neglected. They were awakened from their security only that very day before the commencement of hostilities. The castle of Dublin, by which the capital was commanded, contained arms for 10,000 men, with 35 pieces of cannon, and a proportionable quantity of ammunition. Yet was this important place guarded, and that too without any care, by no greater force than 50 men. Macguire and More were already in town with a numerous band of their retainers; others were expected that night; and next morning they were to enter upon what they esteemed the easiest of all enterprizes, the surprisal of the castle. O'Connolly, however, an Irishman, but a Protestant, discovered the conspiracy. The justices and council fled immediately to the castle, and reinforced the guards. The city was immediately alarmed, and all the Protestants prepared for defence. More escaped, but Macguire was taken; and Mahon, one of the conspirators, being likewise seized, first discovered to the justices the project of a general insurrection.

704
Horrid cruelties of the rebels.

But though O'Connolly's discovery saved the castle from a surprize, Mahon's confession came too late to prevent the intended insurrection. O'Neale and his confederates had already taken arms in Ulster. The houses, cattle, and goods of the English were first seized. Those who heard of the commotions in their neighbourhood, instead of deserting their habitations, and assembling together for mutual protection, remained at home in hopes of defending their property; and fell thus separately into the hands of their enemies. An universal massacre now commenced, accompanied with circumstances of unequalled barbarity. No age, sex, or condition, was spared. All connections were dissolved, and death was dealt by that hand from which protection was implored and expected. All the tortures which wanton cruelty could devise, all the lingering pains of body, the anguish of mind, the agonies of despair, could not satiate revenge excited without injury, and cruelty derived from no cause. Such enormities, in short, were committed, that though attested by undoubted evidence, they appear almost incredible. The stately buildings or commodious habitations of the planters, as if upbraiding the sloth and ignorance of the natives, were consumed with fire, or laid level with the ground; and where the miserable owners, shut up in their houses, and preparing for defence, perished in the flames, together with their wives and children, a double triumph was afforded to their insulting foes. If any where a number assembled together, and resolved to oppose the assassins; they were disarmed by capitulations and promises of safety, confirmed by the most solemn oaths. But no sooner had they surrendered, than the rebels, with perfidy equal to their cruelty,

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made them share the fate of their unhappy countrymen. Others tempted their prisoners, by the fond love of life, to embrace their hands in the blood of friends, brothers, or parents; and having thus rendered them accomplices in their own guilt, gave them that death which they sought to shun by deserving it.

Such were the barbarities by which Sir Phelim O'Neale and the Irish in Ulster signalized their rebellion. More, shocked at the recital of these enormities, flew to O'Neale's camp; but found that his authority, which was sufficient to excite the Irish to a rebellion, was too feeble to restrain their inhumanity. Soon after, he abandoned the cause, and retired to Flanders. From Ulster, the flames of rebellion diffused themselves in an instant over the other three provinces of Ireland. In all places, death and slaughter were not uncommon; though the Irish in these other provinces pretended to act with moderation and humanity. But cruel and barbarous was their humanity! Not content with expelling the English from their houses, they stripped them of their very clothes, and turned them out naked and defenceless to all the severities of the season. The heavens themselves, as if conspiring against that unhappy people, were armed with cold and tempest unusual to the climate, and executed what the sword had left unfinished. By some computations, those who perished by all these cruelties are supposed to amount to 150, or 200,000; but by the most reasonable and moderate, they are made to amount only to 40,000; though probably even this account is not free of exaggeration.

The English of the pale, who probably were not at first in the secret, pretended to blame the insurrection, and to detest the barbarity with which it was accompanied. By their protestations and declarations they engaged the justices to supply them with arms, which they promised to employ in defence of government. But in a little time, the interests of religion were found to be more prevalent over them than regard and duty to their native country. They chose lord Gormonstone their leader; and, joining the old Irish, rivalled them in every act of cruelty towards the English Protestants. Besides many smaller bodies, dispersed over the kingdom, the main army of the rebels amounted to 20,000 men, and threatened Dublin with an immediate siege. Both the English and Irish rebels conspired in one imposture, by which they seduced many of their countrymen. They pretended authority from the king and queen, but especially the latter, for their insurrection; and they affirmed that the cause of their taking arms was to vindicate the royal prerogative, now invaded by the puritanical parliament. Sir Phelim O'Neale, having found a royal patent in the house of lord Caulfield, whom he had murdered, tore off the seal, and affixed it to a commission which he had forged for himself.

The king received intelligence of this insurrection while in Scotland, and immediately acquainted the Scots parliament with it. He hoped, as there had all along been such an outcry against Popery, that now, when that religion was appearing in its blackest colours, the whole nation would vigorously support him in the suppression of it. But here he found himself mistaken. The Scots considering themselves now as a republic, and conceiving hopes from the present distresses of Ireland,

105
Scots refuse to assist in quelling the rebellion.

Britain. land, they resolved to make an advantageous bargain for the succours with which they should supply the neighbouring nation. Except dispatching a small body of forces, to support the Scots colonies in Ulster, they would, therefore, go no farther than to send commissioners to London, in order to treat with the parliament, to whom the sovereign power was in reality transferred. The king, too, sensible of his utter inability to subdue the Irish rebels, found himself obliged, in this exigency, to have recourse to the English parliament, and depend on their assistance for supply. He told them that the insurrection was not, in his opinion, the result of any rash enterprize, but of a formed conspiracy against the crown of England. To their care and wisdom, therefore, he said, he committed the conduct and prosecution of the war, which, in a cause so important to national and religious interests, must of necessity be immediately entered upon, and vigorously pursued.

106
Infamous
conduct of
the English
parliament.

The English parliament, now re-assembled, discovered in each vote the same dispositions in which they had separated. Nothing less than a total abolition of monarchy would serve their turn. But this project it had not been in the power of the popular leaders to have executed, had it not been for the passion which seized the nation for the presbyterian discipline, and the wild enthusiasm which at that time attended it. By the difficulties and distresses of the crown, the commons, who possessed alone the power of supply, had aggrandized themselves; and it seemed a peculiar happiness, that the Irish rebellion had succeeded, at such a critical juncture, to the pacification in Scotland. That expression of the king's, by which he committed to them the care of Ireland, they immediately laid hold of, and interpreted in the most unlimited sense. They had on other occasions been gradually encroaching on the executive power of the crown, which forms its principal and most natural branch of authority; but with regard to Ireland, they at once assumed it, fully and entirely, as if delivered over to them by a regular gift or assignment. And to this usurpation the king was obliged passively to submit, both because of his inability to resist, and lest he should expose himself still more to the charge of favouring the rebels; a reproach eagerly thrown upon him by the popular party as soon as they heard that the Irish pretended to act by his commission. Nay, to complete their character, while they pretended the utmost zeal against the insurgents, they took no steps for their suppression, but such as likewise gave them the superiority in those commotions which they foresaw must be soon excited in England. They levied money under pretence of the Irish expedition, but reserved it for purposes which concerned them more nearly: they took arms from the king's magazines, but still kept them with a secret intention of making use of them against himself: whatever law they deemed necessary for aggrandizing themselves, they voted, under colour of enabling them to recover Ireland; and if Charles withheld his royal assent, the refusal was imputed to those pernicious counsels which had at first excited to Popish rebellion, and which still threatened total ruin to the Protestant interest throughout his dominions. And though no forces were for a long time sent over into Ireland, and very little money remitted during the extreme distress of that kingdom; so strong

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was the people's attachment to the commons, that the fault was never imputed to those pious zealots, whose votes breathed nothing but death and destruction to the Irish rebels.

The conduct of the parliament towards the king now became exceedingly unreasonable, unjust, and cruel. It was thought proper to frame a general remonstrance of the state of the kingdom; and accordingly the committee, which at the first meeting of the parliament had been chosen for that purpose, were commanded to finish their undertaking. The king returned from Scotland November 25th 1641. He was received in London with the shouts and acclamations of the populace, and with every demonstration of regard and affection. Sir Richard Gournay, lord mayor, a man of great merit and authority, had promoted these favourable dispositions; and had engaged the populace, who so lately insulted the king, and who so soon after made furious war upon him, to give him these marks of their dutiful attachment. But all the pleasure which Charles reaped from this joyful reception was soon damped by the remonstrance of the commons, which was presented to him together with a petition of the like nature. The bad counsels which he followed were there complained of; his concurrence in the Irish rebellion plainly insinuated; the scheme laid for the introduction of popery and superstition was inveighed against; and for a remedy to all these evils, the king was desired to entrust every office and command to persons in whom his parliament should have cause to confide. By this phrase, which was very often repeated in all the memorials and addresses of that time, the commons meant themselves and their adherents. To this remonstrance Charles was obliged to make a civil reply, notwithstanding his subjects had transgressed all bounds of respect and even good manners in their treatment of their sovereign.

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107
King re-
turns from
Scotland.

It would be tedious to point out every invasion of the prerogative now attempted by the commons: but finding themselves at last likely to be opposed by the nobility, who saw their own depression closely connected with that of the crown, they openly told the upper house, that "they themselves were the representatives of the whole body of the kingdom, and that the peers were nothing but individuals, who held their seats in a particular capacity; and therefore, if their lordships would not consent to acts necessary for the preservation of the people, the commons, together with such of the lords as were more sensible of the danger, must join together and represent the matter to his majesty." Every method proper for alarming the populace was now put in practice. The commons affected continual fears of destruction to themselves and to the whole nation. They excited the people by never-ceasing inquiries after conspiracies, by reports of insurrections, by feigned intelligence of invasions from abroad, and by discoveries of dangerous combinations at home, against Papists and their adherents. When Charles dismissed the guard which they had ordered during his absence, they complained; and, upon his promising them a new guard under the command of the earl of Lindsey, they absolutely refused the offer: they ordered halberts to be brought into the hall where they assembled, and thus armed themselves against those conspiracies with which they pretended they were hourly threatened.

108

Commons
assume the
sovereignty

¹⁰⁹ Britain. threatened. Several reduced officers, and young gentlemen of the inns of court, during this time of distress and danger, offered their service to the king. Between them and the populace there passed frequent skirmishes, which ended not without bloodshed. By way of reproach, these gentlemen gave the rabble the name of *round-heads*, on account of their short cropped hair; while they distinguished the others by the name of *cavaliers*. And thus the nation, which was before sufficiently provided with religious as well as civil causes of quarrel, was also supplied with party-names, under which the factions might rendezvous and signalize their mutual hatred.

¹⁰⁹ Round-heads and Cavaliers.

¹¹⁰ Bishops retire from the house of lords.

These tumults continued to increase about Westminster and Whitehall. The cry continually resounded against bishops and *rotten-hearted lords*. The former especially, being easily distinguishable by their habit, and being the object of violent hatred to all the sectaries, were exposed to the most dangerous insults. The archbishop of York, having been abused by the populace, hastily called a meeting of his brethren. By his advice a protestation was drawn and addressed to the king and the house of lords. The bishops there set forth, that though they had an undoubted right to sit and vote in parliament, yet in coming thither they had been menaced, assaulted, affronted, by the unruly multitude, and could no longer with safety attend their duty in the house. For this reason they protested against all laws, votes, and resolutions, as null and invalid, which should pass during the time of their forced absence. This protestation, which, though just and legal, was certainly ill-timed, was signed by twelve bishops, and communicated to the king, who hastily approved of it. As soon as it was presented to the lords, that house desired a conference with the commons, whom they informed of this unexpected protestation. The opportunity was seized with joy and triumph. An impeachment of high treason was immediately sent up against the bishops, as endeavouring to subvert the fundamental law, and to invalidate the authority of the legislature. They were, on the first demand, sequestered from parliament, and committed to custody. No man in either house ventured to speak a word in their vindication: so much was every one displeased at the egregious imprudence of which they had been guilty. One person alone said, that he did not believe them guilty of high treason; but that they were stark mad, and therefore desired they might be sent to bedlam.

This was a fatal blow to the royal interest; but it soon felt a much greater from the imprudence of the king himself. Charles had long suppressed his resentment, and only strove to gratify the commons by the greatness of his concessions; but finding that all his compliance had but increased their demands, he could no longer contain. He gave orders to Herbert his attorney-general to enter an accusation of high treason, in the house of peers, against lord Kimbolton, one of the most popular men of his party, together with five commoners, Sir Arthur Haslerig, Hollis, Hambden, Pym, and Strode. The articles were, That they had traiterously endeavoured to subvert the fundamental laws and government of the kingdom, to deprive the king of his regal power, and to impose on his subjects an arbitrary and tyrannical authority; that they had invited a fo-

¹¹¹ Six members of parliament impeached by the king's order.

reign army to invade the kingdom; that they had aimed at subverting the very right and being of parliaments; and had actually raised and countenanced tumults against the king. Men had scarce leisure to wonder at the precipitancy and imprudence of this impeachment, when they were astonished by another measure still more rash and unsupported. A serjeant at arms, in the king's name, demanded of the house the five members, and was sent back without any positive answer. This was followed by a conduct still more extraordinary. The next day, the king himself was seen to enter the house of commons alone, advancing through the hall, while all the members stood up to receive him. The speaker withdrew from his chair, and the king took possession of it. Having seated himself, and looked round him for some time, he told the house, that he was sorry for the occasion that forced him thither; that he was come in person to seize the members whom he had accused of high treason, seeing they would not deliver them up to his serjeant at arms. Then addressing himself to the speaker, he desired to know whether any of them were in the house: but the speaker, falling on his knees, replied, that he had neither eyes to see, nor tongue to speak, in that place, but as the house was pleased to direct him; and he asked pardon for being able to give no other answer. The king sat for some time, to see if the accused were present; but they had escaped a few minutes before his entry. Thus disappointed, perplexed, and not knowing on whom to rely, he next proceeded amidst the invectives of the populace, who continued to cry out, *Privilege! privilege!* to the common council of the city, and made his complaint to them. The common council answered his complaints by a contemptuous silence; and, on his return, one of the populace, more insolent than the rest, cried out, "To your tents, O Israel!" a watch-word among the Jews, when they intended to abandon their princes.

Britain. ¹¹² He goes in person to seize them.

When the commons assembled the next day, they pretended the greatest terror; and passed an unanimous vote that the king had violated their privileges, and that they could not assemble again in the same place, till they should obtain satisfaction, and have a guard for their security. The king had retired to Windsor, and from thence he wrote to his parliament, making every concession, and promising every satisfaction in his power. But they were resolved to accept of nothing unless he would discover his advisers in that illegal measure; a condition to which, they knew, that, without rendering himself for ever vile and contemptible, he could not possibly submit.

The commons had already stripped the king of almost all his privileges; the bishops were fled, the judges were intimidated; it now only remained, after securing the church and the law, that they should get possession of the sword also. The power of appointing governors and generals, and of levying armies, was still a remaining prerogative of the crown. Having therefore first magnified their terrors of Popery, which perhaps they actually dreaded, they proceeded to petition that the Tower might be put into their hands; and that Hull, Portsmouth, and the fleet, should be intrusted to persons of their choosing. These were requests, the complying with which subverted what remained of the constitution; however, such was the necessity of the times, that they were first contested, and then granted. At last, every compliance

¹¹³

Bad consequences of this attempt

¹¹⁴

Commons demand possession of the executive power of the state.

Britain.

compliance only increasing the avidity of making fresh demands, the commons desired to have a militia, raised and governed by such officers and commanders as they should nominate, under pretence of securing them from the Irish Papists, of whom they were under the greatest apprehension.

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Refused by
the king.

It was here that Charles first ventured to put a stop to his concessions; and that not by a refusal, but a delay. He was at that time at Dover attending the queen and the princess of Orange, who had thought it prudent to leave the kingdom. He replied to the petition, that he had not now leisure to consider a matter of such great importance; and therefore would defer an answer till his return. But the commons were well aware, that though this was depriving him even of the shadow of power, yet they had now gone too far to recede; and they were therefore desirous of leaving him no authority whatever, being conscious that themselves would be the first victims to its fury. They alleged, that the dangers and distempers of the nation were such as could endure no longer delay; and unless the king should speedily comply with their demands, they should be obliged, both for his safety and that of the kingdom, to embody and direct a militia by the authority of both houses. In their remonstrances to the king, they desired even to be permitted to command the army for an appointed time; which so exasperated him, that he exclaimed, "No, not for an hour." This peremptory refusal broke off all further treaty; and both sides were now resolved to have recourse to arms.

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War resolved
on between the
king and
parliament.

Charles, taking the prince of Wales with him, retired to York, where he found the people more loyal, and less infected with the frenzy of the times. He found his cause there backed by a more numerous party among the people than he had expected. The queen, who was in Holland, was making successful levies of men and ammunition by selling the crown-jewels. But before war was openly declared, the shadow of a negotiation was carried on, rather with a design to please the people than with any view of reconciliation. Nay, that the king might despair of all composition, the parliament sent him the conditions on which they were willing to come to an agreement. Their demands were contained in 19 propositions, and amounted to a total abolition of monarchical authority. They required that no man should remain in the council who was not agreeable to parliament; that no deed of the king's should have validity unless it passed the council, and was attested under their hand; and that all the officers of state should be chosen with consent of parliament; that none of the royal family should marry without consent of parliament or council; that the laws should be executed against Catholics; that the votes of Popish lords should be excluded; that the reformation of the liturgy and church-government should take place according to the advice of parliament; that the ordinance with regard to the militia be submitted to; that the justice of parliament may pass upon all delinquents; that a general pardon be granted with such exceptions as should be advised by parliament; that the forts and castles be disposed of by consent of parliament; and that no peers be made but with consent of both houses. War on any terms was esteemed, by the king and all his counselors, preferable to so ignominious a peace. Charles

117
Shameful
requisitions
of parliament.

accordingly resolved to support his authority by force of arms. "His towns (he said) were taken from him; his ships, his army, and his money: but there still remained to him a good cause, and the hearts of his loyal subjects; which, with God's blessing, he doubted not would recover all the rest." Collecting therefore some forces, he advanced southwards, and erected his royal standard at Nottingham.

The king found himself supported in the civil war by the nobility and more considerable gentry. They, dreading a total confusion of rank from the fury of the populace, enlisted themselves under the banner of their monarch: from whom they received, and to whom they communicated, their lustre. The concurrence of the bishops and church of England also increased the adherents of the king; but it may be safely affirmed, that the high monarchical doctrines so much inculcated by the clergy, had never done him any good. The bulk of the nobility and gentry who now attended the king in his distresses, breathed the spirit of liberty as well as of loyalty: and in the hopes alone of his submitting to a limited and legal government they were willing to sacrifice their lives and fortunes.

On the other hand, the city of London, and most of the great corporations, took part with the parliament; and adopted with zeal those democratical principles on which these assemblies were founded. The example of the Dutch commonwealth, too, where liberty had so happily supported industry, made the commercial part of the nation desire to see a like form of government established in England. Many families also, who had enriched themselves by commerce, saw with indignation, that, notwithstanding their opulence, they could not raise themselves to a level with the ancient gentry; they therefore adhered to a power by whose success they hoped to acquire rank and consideration.

At first every advantage seemed to lie against the royal cause. The king was totally destitute of money. London, and all the sea-ports except Newcastle, being in the hands of parliament, they were secure of a considerable revenue; and the seamen naturally following the disposition of the ports to which they belonged, the parliament had the entire dominion of the sea. All the magazines of arms and ammunition they seized at first; and their fleet intercepted the greatest part of those sent by the queen from Holland. The king, in order to arm his followers, was obliged to borrow the weapons of the train bands, under promise of restoring them as soon as peace should be settled. The nature and qualities of his adherents alone gave the king some compensation for all the advantages possessed by his adversaries. More bravery and activity were hoped for from the generous spirit of the nobles and gentry, than from the base disposition of the multitude. And as the landed gentlemen, at their own expence, levied and armed their tenants, besides an attachment to their masters, greater force and courage were to be expected from these rustic troops than from the vicious and enervated populace of cities. Had the parliamentary forces, however, exerted themselves at first, they might have easily dissipated the small number the king had been able to collect, and which amounted to no more than 800 horse and 300 foot; while his enemies were within a few days march of him with 6000 men. In a short time the parliamentary army were ordered to

Britain.

118
Rejected by
Charles.

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Distressed
condition of
the royalists

¹²⁰ Britain. march to Northampton; and the earl of Essex, who had joined them, found the whole to amount to 15,000. The king's army too was soon reinforced from all quarters; but still, having no force capable of coping with the parliamentary army, he thought it prudent to retire to Derby, and from thence to Shrewsbury, in order to countenance the levies which his friends were making in those parts. At Wellington, a day's march from Shrewsbury, he made a rendezvous of all his forces, and caused his military orders to be read at the head of every regiment. That he might bind himself by reciprocal obligations, he here protested solemnly before his whole army, that he would maintain the Protestant religion according to the church of England; that he would govern according to the known statutes and customs of the kingdom; and particularly, that he would observe inviolable the laws to which he had given his consent during this parliament, &c.

¹²⁰ They gain an advantage over their enemies.

While Charles lay at Shrewsbury, he received the news of an action, the first which had happened in these parts, and wherein his party was victorious. On the appearance of commotions in England, the princes Rupert and Maurice, sons of the unfortunate elector palatine, had offered their service to the king; and the former at that time commanded a body of horse which had been sent to Worcester in order to watch the motions of Essex, who was marching towards that city. No sooner had the prince arrived, than he saw some cavalry of the enemy approaching the gates. Without delay he briskly attacked them, as they were defiling from a lane, and forming themselves. Colonel Sandys their commander was killed, the whole party routed, and pursued above a mile.

¹²¹ Battle of Edgehill.

In 1642, October 23d, happened a general engagement at Edgehill, in which, though the royalists were at first victorious, their impetuosity lost the advantage they had gained, and nothing decisive happened. Five thousand men, it is said, were found dead on the field of battle. Soon after, the king took Banbury and Reading; and defeated two regiments of his enemies at Brentford, taking 500 prisoners. Thus ended the campaign in 1642; in which, though the king had the advantage, yet the parliamentary army amounted to 24,000 men, and was much superior to his; notwithstanding which, his enemies had been so far humbled as to offer terms of peace.

In 1643, the treaty was carried on, but without any cessation of hostilities: and indeed the negotiation went no farther than the first demand on each side; for the parliament, finding no likelihood of coming to an accommodation, suddenly recalled their commissioners. On the 27th of April, Reading surrendered to the parliamentary forces under the earl of Essex, who com-

¹²² Association in favour of the king.

manded a body of 18,000 men. The earl of Northumberland united in a league for the king the counties of Northumberland, Cumberland, Westmoreland, and the bishopric; and engaged some time after other counties in the same association. The same nobleman also took possession of York, and dislodged the forces of the parliament at Tadcaster, but his victory was not decisive. Other advantages were also gained by the royalists; the most important of which was the battle of

¹²³ Parliamentary forces defeated at Stratton.

Stratton, where the poet Waller, who commanded the parliament's army, was entirely defeated, and forced to fly with only a few horse to Bristol. This happened on

the 13th of July; and was followed by the siege of that city, which surrendered to prince Rupert on the 25th of the same month.

Though the taking of Bristol had cost the royalists dear, yet such a continued run of success had greatly dispirited the opposite party; and such confusion now prevailed at London, that some proposed to the king to march directly to that city, which it was hoped might be reduced either by an insurrection of the citizens by victory or by treaty, and thus an end put to the civil disorders at once. This advice, however, was rejected, on account of the great number of the London militia; and it was resolved first to reduce Gloucester, in consequence of which the king would have the whole course of the Severn under his command. The rich and malcontent counties of the west having then lost all protection from their friends, might be enforced to pay large contributions as an atonement for their disaffection; an open communication could be preserved between Wales and these new conquests; and half the kingdom being entirely freed from the enemy, and thus united into one firm body, might be employed in re-establishing the king's authority throughout the remainder.

The siege of this city commenced August 10th; but being defended by Massey a resolute governor, and well garrisoned, made a vigorous defence. The consternation at London, however, was as great as if the enemy had been already at their gates; and in the midst of the general confusion, a design was formed by Waller of forcing the parliament to accept of some reasonable conditions of peace. He imparted his design to some others; but a discovery being made of their proceedings, he and two others were condemned to death. Waller, however, escaped with a fine of 10,000 £. The city of Gloucester in the mean time was reduced to the utmost extremity; and the parliament, as their last resource, dispatched Essex with an army of 14,000 men, in order to force the king to raise the siege of that city. This he accomplished; and when he entered, found only one barrel of gunpowder left, and other provisions in the same proportion. On his return to London, he was intercepted by the king's army, with whom a desperate battle ensued at Newbury which lasted till night. Though the victory was left undecided, Essex next morning proceeded on his march, and reached London in safety, where he received the applause for his conduct he deserved. The king followed him on his march; and having taken possession of Reading after the earl left it, he there established a garrison, and straitened by that means London and the quarters of the enemy.

In the north, during this summer, the earl, now created marquis of Newcastle, had raised a considerable force for the king; and great hopes of success were entertained from that quarter. There appeared, however, in opposition to him, two men on whom the event of the war finally depended, and who began about this time to be remarked for their valour and military conduct. These were, Sir Thomas Fairfax, son to the lord of that name; and Oliver Cromwell. The former gained a considerable advantage over the royalists at Wakefield, and took general Goring prisoner: the latter obtained a victory at Gainsborough over a party commanded by the gallant Cavendish, who perished in the action.

¹²⁴ Charles besieges Gloucester.

¹²⁵ He is forced to raise the siege.

¹²⁶ Battle of Newbury.

¹²⁷ Advantages gained by Fairfax and Cromwell.

Britain.

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Lord Fair-

fax defeated

at Atherton

action. But both these defeats were more than compensated by the total rout of lord Fairfax at Atherton moor, and the dispersion of his army, which happened on the 31st of July. After this victory, the marquis of Newcastle sat down before Hull with an army of 15,000 men; but being beat off by a sally of the garrison, he suffered so much that he thought proper to raise the siege. About the same time, Manchester, who advanced from the eastern associated counties, having joined Cromwell and young Fairfax, obtained a considerable victory over the royalists at Horn castle; where the two last mentioned officers gained renown by their conduct and gallantry. And though fortune had thus balanced her favours, the king's party still remained much superior in those parts of England; and had it not been for the garrison of Hull, which kept Yorkshire in awe, a conjunction of the northern forces with the army in the south might have been made, and had probably enabled the king, instead of entering on the unfortunate, perhaps imprudent enterprise of Gloucester, to march directly to London, and put an end to the war. The battle of Newbury was attended with such loss on both sides, that it put an end to the campaign of 1643, by obliging both parties to retire into winter quarters.

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English par-
liament ask
assistance
from the
Scots.

The event of the war being now very doubtful, the king and parliament began both of them to look for assistance from other nations. The former cast his eyes on Ireland, the latter on Scotland. The parliament of England had ever invited the Scots, from the commencement of the civil dissensions, to interpose their mediation, which they knew would be very little favourable to the king, and which for that reason he had declined. Early in the spring 1643, this offer of mediation had been renewed, with no better success than before. The commissioners were also empowered to press the king to a compliance with the presbyterian worship and discipline. But this he absolutely refused, as well as to call a parliament in Scotland; so that the commissioners, finding themselves unable to prevail in any one of their demands, returned home highly dissatisfied. The English parliament being now in great distress, gladly sent commissioners to Edinburgh, to treat of a more close confederacy with the Scottish nation. The person they principally trusted to on this occasion was Sir Henry Vane, who in eloquence, address, capacity, as well as in art and dissimulation, was not even surpassed by any one in that age so famous for active talents. By his persuasions was framed at Edinburgh the SOLEMN LEAGUE AND COVENANT; which effaced all former protestations and vows taken in both kingdoms, and long maintained its credit and authority. In this covenant, the subscribers, besides engaging mutually to defend each other against all opponents, bound themselves to endeavour, without respect of persons, the extirpation of popery and prelacy, superstition, heresy, and profaneness; to maintain the rights and privileges of parliaments, together with the king's authority; and to discover and bring to justice all incendiaries and malignants. They vowed also to preserve the reformed religion established in the church of Scotland; but by the artifice of Vane, no declaration more explicit was made with regard to England and Ireland, than that these kingdoms should

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Solemn
league and
covenant
framed.

be reformed according to the word of God, and the example of the purest churches.

Great were the rejoicing among the Scots, that they should be the happy instruments of extending their mode of religion, and dissipating the profound darkness in which the neighbouring nations were involved. And being determined that the sword should carry conviction to all refractory minds, they prepared themselves with great vigilance and activity for their military enterprises; so that, having added to their other forces the troops which they had recalled from Ireland, they were ready about the end of the year to enter England under their old general the earl of Leven, with an army of above 20,000 men. The king, in order to secure himself, concluded a cessation of arms with the Irish rebels, and recalled a considerable part of his army from Ireland. Some Irish catholics came over with these troops, and joined the royal army, where they continued the same cruelties and disorders to which they had been accustomed. The parliament voted, that no quarter in any action should ever be given them. But prince Rupert, by making some reprisals, soon repressed this inhumanity.

The campaign of 1644 proved very unfortunate to the royal cause. The forces brought from Ireland were landed at Moystne in North Wales, and put under the command of lord Biron. They besieged and took the castles of Hawarden, Beeston, Acton, and Deddington-house. No place in Cheshire or the neighbourhood now adhered to the parliament, except Lantwich; and to this place Biron laid siege in the depth of winter. Sir Thomas Fairfax, alarmed at so great a progress, assembled an army of 4000 men in Yorkshire; and having joined Sir William Brereton, was approaching to the camp of the royalists. Biron and his soldiers, elated with successes in Ireland, entertained a most profound contempt for their enemies. Fairfax suddenly attacked their camp. The swelling of the river by a thaw divided one part of the army from another. That part exposed to Fairfax, being beat from their post, retired into the church at Acton, where being surrounded, they were all taken prisoners. The other retreated with precipitation; and thus was dissipated or rendered useless that body of forces which had come from Ireland. This happened on the 25th of January; and on the 11th of April, Colonel Bellasis was totally defeated at Selby in Yorkshire by Sir Thomas Fairfax, who had returned from Cheshire with his victorious forces. Being afterwards joined by lord Leven, the two generals sat down before the city of York; but being unable to invest that city completely, they were obliged to content themselves with incommoding it by a loose blockade. Hopeton, having assembled a body of 14,000 men, endeavoured to break into Sussex, Kent, and the southern association, which seemed well disposed to receive him; but was defeated by Waller at Cherington. At Newark, however, prince Rupert totally defeated the parliamentary army which besieged that place; and thus preserved the communication open between the king's northern and southern quarters.

The great advantages the parliament had gained in the north, seemed now to second their unwarrantable enterprises, and finally to promise them success. Man-

chester

Britain.

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Charles as-
sisted by the
Irish.

132
Irish forces
dispersed.

¹³³ Britain. chester having taken Lincoln, had united his army to that of Leven and Fairfax; and York was now closely besieged by their numerous forces. That town, though vigorously defended by the marquis of Newcastle, was reduced to the last extremity, when prince Rupert, having joined Sir Charles Lucas who commanded Newcastle's horse, hastened to its relief with an army of 20,000 men. The Scots and parliamentary generals raised the siege, and drawing up on Marston moor, proposed to give battle to the royalists. Prince Rupert approached the town by another quarter, and interposing the river Ouse between him and the enemy, safely joined his forces to those of Newcastle. The marquis endeavoured to persuade him, that having so successfully effected his purpose, he ought to be contented with the present advantages, and leave the enemy, now much diminished by their losses, and discouraged by their ill success, to dissolve by those mutual dissensions which had begun to take place among them. The prince, however, hurried on by his natural impetuosity, gave immediate orders for fighting. The battle was lost, the royal army entirely pushed off the field, and the train of artillery taken. Immediately after this unfortunate action the marquis of Newcastle left the kingdom, and prince Rupert retired into Lancashire. The city of York was surrendered in a few days, and Newcastle soon after taken by storm.

¹³³ York besieged by the parliamentary forces.

¹³⁴ Royalists defeated at Marston moor.

¹³⁵ Extravagant demands of the parliament.

This was a fatal blow to the royal cause, and far from being balanced by an advantage gained at Cropredy bridge by the king over Waller, or even by the disarming of Essex's forces, which happened on the 1st of September. On the 27th of October, another battle was fought at Newbury, in which the royalists were worsted, but soon after retrieved their honour at Dennington castle, which finished the campaign in 1644. In 1645, a negotiation was again set on foot, and the commissioners met at Uxbridge on the 30th of January; but it was soon found impossible to come to any agreement. The demands of the parliament were exorbitant; and, what was worse, their commissioners owned them to be nothing but preliminaries. The king was required to attain, and except from a general pardon, 40 of the most considerable of his English subjects, and 19 of his Scots, together with all the Popish recusants who had borne arms for him. It was insisted that 48 more, with all the members of either house who had sat in the parliament called by the king at Oxford, all lawyers and divines who had embraced the king's party, should be rendered incapable of any office, be forbid the exercise of their profession, be prohibited from coming within the verge of the court, and forfeit the third of their estates to the parliament. It was required, that whoever had borne arms for the king should forfeit the tenth of their estates, or if that did not suffice, the sixth, for the payment of public debts. As if royal authority were not sufficiently annihilated by these terms, it was demanded that the court of wards should be abolished; that all the considerable officers of the crown, and all the judges, should be appointed by parliament; and that the right of peace and war should not be exercised without consent of parliament. A little before the commencement of this fruitless treaty, the parliament, to show their determined resolution to proceed in the same haughty imperious method in which they had begun, brought to

the block archbishop Laud, who had long been a prisoner in the tower, and was incapable of giving offence to any.

While the king's affairs thus went into decay in England, they seemed to revive a little in Scotland, through the conduct and valour of the earl of Montrose, a young nobleman newly returned from his travels. He had been introduced to the king; but not meeting with an agreeable reception, had gone over to the covenanters, and been active in forwarding all their violence. Being commissioned, however, by the *tables*, to wait upon the king while the army lay at Berwick, he was so gained by the civilities and caresses of that monarch, that he thenceforth devoted himself entirely, though secretly, to his service. For attempting to form an association in favour of the royal cause, Montrose was quickly thrown into prison; but being again released, he found the king ready to give ear to his counsels, which were of the boldest and most daring kind. Though the whole nation of Scotland was occupied by the covenanters, though great armies were kept on foot by them, and every place guarded by a vigilant administration, he undertook by his own credit, and that of the few friends who remained to the king, to raise such commotions, as would soon oblige those malcontents to recal the forces which had so sensibly thrown the balance in the favour of parliament. The defeat at Marston-moor had left him no hopes of any succours from England; he was therefore obliged to stipulate with the earl of Antrim, a nobleman of Ireland, for some supply of men from that country. And he himself having used various disguises, and passed through many dangers, arrived in Scotland, where he lay for some time concealed in the borders of the Highlands.

The Irish did not exceed 1100 foot, very ill armed. Montrose immediately put himself at their head; and being joined by 1300 Highlanders, attacked lord Elcho, who lay at Perth with 6000 men, utterly defeated him, and killed 2000 of the covenanters. He next marched northwards, in order to rouse again the marquis of Huntly and the Gordons, who had taken arms before, but been suppressed by the covenanters. At Aberdeen, he attacked and entirely defeated lord Burley, who commanded 2500 men. Montrose, however, by this victory, did not obtain the end he proposed; the marquis of Huntly showed no inclination to join an army where he was so much eclipsed by the general.

Montrose was now in a very dangerous situation. Argyle, reinforced by the earl of Lothian, was behind him with a great army. The militia of the northern counties, Murray, Ross, and Caithness, to the number of 5000, opposed him in front, and guarded the banks of the Spey, a deep and rapid river. In order to save his troops, he turned aside unto the hills; and after some marches and countermarches, Argyle came up with him at Faivy castle; and here, after some skirmishes, in which he was always victorious, Montrose got clear of a superior army, and by a quick march through these almost inaccessible mountains put himself absolutely beyond their power.

It was the misfortune of this general, that very good or very ill fortune were equally destructive of his army. After every victory his Scots soldiers went home to enjoy

Britain.
¹³⁶ Execution of Laud.
¹³⁷ Exploits of the earl of Montrose in Scotland.

Britain. joy the spoil they had acquired; and had his army been composed of these only, he must have soon been abandoned altogether: but his Irishmen having no place to which they could retire, adhered to him in every fortune. With these, therefore, and some reinforcements of the Atholmen and Macdonalds, Montrose fell suddenly upon Argyle's country, letting loose upon it all the horrors of war. Argyle, collecting 3000 men, marched in quest of the enemy, who had retired with their plunder; and he lay at Innerlochy, supposing himself to be still at a good distance from them. The earl of Seaforth, at the head of the garrison of Inverness, and a body of 5000 new-levied troops, pressed the royalists on the other side, and threatened them with total destruction. By a quick and unexpected march, Montrose hastened to Innerlochy, and presented himself in order of battle before the covenanters. Argyle alone, seized with a panic, deserted his army. They made a vigorous resistance, however; but were at last defeated and pursued with great slaughter: after which Montrose was joined by great numbers of Highlanders; Seaforth's army dispersed of itself; and the lord Gordon, eldest son to the marquis of Huntly, having escaped from his uncle Argyle, who had hitherto detained him, now joined Montrose with a considerable number of his followers, attended by the earl of Aboyne.

The council at Edinburgh, alarmed at these victories, sent for Baillie, an officer of reputation, from England; and, joining him in command with Urrey, sent them with a considerable army against the royalists. Montrose, with a detachment of 800 men, had attacked Dundee, a town extremely attached to the covenant; and having carried it by assault, had given it up to be plundered by his soldiers; when Baillie and Urrey with their whole force came upon him. He instantly called off his soldiers from the plunder; put them in order; secured his retreat by the most skilful measures; and having marched 60 miles in the face of an enemy much superior, without stopping, or allowing his soldiers the least sleep or refreshment, at last secured himself in the mountains. His antagonists now divided their forces, in order to carry on the war against an enemy who surprised them as much by the rapidity of his marches as by the boldness of his enterprizes. Urrey met him

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He defeats
two armies,
each double
in number
to his own.

as by the boldness of his enterprizes. Urrey met him with 4000 men, at Alderne near Inverness; and trusting to his superiority in numbers (for Montrose had only 2000 men), attacked him in the post which he had chosen. Montrose, having placed his right wing in strong ground, drew the best of his forces to the other, and left no main body between them; a defect which he artfully concealed by showing a few men through trees and bushes with which that ground was covered. That Urrey might have no leisure to perceive the stratagem, he instantly led his wing to the charge, made a furious attack on the covenanters, drove them off the field, and obtained a complete victory over them. Baillie now advanced, in order to revenge Urrey's defeat; but he himself met with a like fate at Alford. Montrose, weak in cavalry, lined his troops of horse with infantry; and, after putting the enemy's horse to rout, fell with united force upon their foot, which were entirely cut in pieces, though with the loss of the gallant lord Gordon on the part of the royalists. — Having thus prevailed in so many battles, which his vigour always rendered as decisive as they were success-

ful, he prepared for marching into the southern provinces, in order to put a total period to the power of the covenanters, and dissipate the parliament, which with great pomp and solemnity they had ordered to meet at St Johnstone's.

While Montrose was thus signaling his valour in the north, Fairfax, or rather Oliver Cromwell under his name, employed himself in bringing in a new model into the parliamentary army, and throwing the whole troops into a different shape; and never surely was a more singular army established, than that which was now set on foot by the parliament. To the greatest number of the regiments chaplains were not appointed. The officers assumed the spiritual duty, and united it with their military functions. During the intervals of action, they occupied themselves in sermons, prayers, and exhortations. Rapturous ecstasies supplied the place of study and reflection; and while the zealous devotees poured out their thoughts in unpremeditated harangues, they mistook that eloquence, which to their own surprise, as well as that of others, flowed in upon them, for divine illuminations, and illapses of the Holy Spirit. Wherever they were quartered, they excluded the minister from his pulpit; and, usurping his place, conveyed their sentiments to the audience with all the authority that followed their power, their valour, and their military exploits, united to their apparent zeal and fervour. The private soldiers were seized with the same spirit; and in short, such an enthusiasm seized the whole army as was perhaps scarce ever equalled.

The royalists ridiculed this fanaticism of the parliamentary armies, without being sensible how much reason they had to dread it. They were at this time equal, if not superior, in numbers to their enemies; but so licentious, that they were become more formidable to their friends than their enemies. The commanders were most of them men of dissolute characters; in the west especially, where Goring commanded, universal spoil and havock were committed; and the whole country was laid waste by the rapine of the army; so that the most devoted friends both to the church and state wished there for such success to the parliamentary forces as might put an end to these disorders.

The natural consequence of such enthusiasm in the parliamentary army, and licentiousness in that of the royalists, was, that equal numbers of the latter would no longer maintain their ground against the former. This appeared in the decisive battle of Naseby, where the forces were nearly equal; but after an obstinate engagement, Charles was entirely defeated, 500 of his officers and 4000 private men made prisoners, all his artillery and ammunition taken, and his infantry totally dispersed; so that scarce any victory could be more complete.

After this fatal battle, the king retired first to Hereford, then to Abergavenny; and remained some time in Wales, from the vain hope of raising a body of infantry in these quarters already harassed and exhausted. His affairs now, however, went to ruin in all quarters. Fairfax retook Leicester on the 17th of June. On the 10th of July, he raised the siege of Taunton; and the royalists retired to Lamport, an open town in the county of Somerset. Here they were attacked by Fairfax, and beat from their post, with the loss of 300 killed and 1400 taken prisoners. This was followed by the

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Parliamentary army
new model
led.

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The Royalists
defeated at
Naseby.

¹⁴¹ Britain. the loss of Bridgewater, which Fairfax took three days after; making the garrison, to the number of 2600 men, prisoners of war. He then reduced Bath and ¹⁴¹ Bristol taken. Sharburn; and on the 11th of September Bristol was surrendered to him by Prince Rupert, though a few days before he had boasted in a letter to Charles, that he would defend the place for four months. This so enraged the king, that he immediately recalled all the prince's commissions, and sent him a pass to go beyond sea.

The Scots in the mean time, having made themselves masters of Carlisle after an obstinate siege, marched southwards and invested Hereford; but were obliged to raise the siege on the king's approach. And this was the last glimpse of success that attended his arms. Having marched to the relief of Chester, which was anew besieged by the parliamentary forces under colonel Jones, his rear was attacked by Pointz, and an engagement immediately ensued. While the fight was continued with great obstinacy, and victory seemed to incline to the royalists, Jones fell upon them from the other side, and defeated them with the loss of 600 killed and 1000 taken prisoners. The king with the remains of his army fled to Newark; and from thence ¹⁴² Charles retires to Oxford. escaped to Oxford, where he shut himself up during the winter season.

After the surrender of Bristol, Fairfax and Cromwell having divided their forces, the former marched westwards in order to complete the conquest of Devonshire and Cornwall; the latter attacked the king's garrisons which lay to the east of Bristol. Nothing was able to stand before these victorious generals; every town was obliged to submit, and every body of troops that pretended to resist were utterly defeated. At last, news arrived, that Montrose himself, after some more successes, was defeated; and thus the only hope of the royal party was destroyed.

¹⁴³ Montrose defeated. When that brave general descended into the southern counties, the covenanters, assembling their whole force, met him with a numerous army, and gave him battle at Kilsyth. Here he obtained his most memorable victory: 6000 of the covenanters were killed on the spot, and no remains of an army left them in Scotland. Many noblemen, who secretly favoured the royal cause, now declared openly for it, when they saw a force able to support them. The marquis of Douglas, the earls of Annandale and Hartfield, the lords Fleming, Seton, Maderty, Carnegy, with many others, flocked to the royal standard. Edinburgh opened its gates, and gave liberty to all the prisoners there detained by the covenanters. Among the rest was lord Ogilvy, son to Airly, whose family had contributed very much to the victory gained at Kilsyth.—David Lesly was detached from the army in England, and marched to the relief of his distressed party in Scotland. Montrose advanced still further to the south, allured by the vain hopes, both of rousing to arms the earls of Hume, Traquair, and Roxburgh, who had promised to join him; and of obtaining from England some supply of cavalry, in which he was very deficient. By the negligence of his scouts, Lesly, at Philip-haugh in the forest, surprised his army, much diminished in numbers from the desertion of the Highlanders, who had retired to the hills, according to custom, to secure their plunder. After a sharp conflict, in which Montrose exerted great valour,

his forces were routed by Lesly's cavalry, and he himself forced to fly to the mountains.

Nothing could be more affecting than the situation in which the king now was. He now resolved to grant the parliament their own terms, and sent them repeated messages to this purpose, but they never deigned to make him the least reply. At last, after reproaching him with the blood spilt during the war, they told him that they were preparing some bills, to which, if he would consent, they would then be able to judge of his pacific inclinations. Fairfax, in the mean time, was advancing with a victorious army in order to lay siege to Oxford; and Charles, rather than submit to be taken captive and led in triumph by his insolent subjects, resolved to give himself up to the Scots, who had never testified such implacable animosity against him, and to trust to their loyalty for the rest. After passing through many bye-ways and cross-roads, he arrived in company with only two persons, Dr Hudson and Mr Ashburnham, at the Scots camp before Newark, and discovered himself to lord Leven their general. ¹⁴⁴ Charles surrenders himself to the Scots.

The reception he met with was such as might be expected from these infatuated bigots, destitute of every principle of reason, honour, or humanity. Instead of endeavouring to alleviate the distresses of their sovereign, they suffered him to be insulted by the clergymen. They immediately sent an account of his arrival to the English parliament, and they as quickly entered into a treaty with the Scots about delivering up their prisoner. ¹⁴⁵ Who sell him to the English. The Scots thought this a proper time for the recovery of their arrears due to them by the English. A great deal was really due them, and they claimed much more than actually belonged to them. At last, after various debates between them and the parliament, in which they pretended to great honour, and insisted upon many punctilios, it was agreed, that, upon payment of L. 400,000, the Scots should deliver up the king to his enemies; and this was cheerfully complied with. Thus the Scots justly fell under the censure of having sold their king who had thrown himself upon their mercy; a stain peculiar to the nation, and unparalleled in history either ancient or modern. It must, however, be acknowledged, that the infamy of this bargain had such an influence on the Scots parliament, that they once voted that the king should be protected and his liberty insisted on. But the general assembly interposed; and pronounced, that as he had refused to take the covenant which was pressed on him, it became not the godly to concern themselves about his fortunes. In consequence of this, the parliament were obliged to retract their vote. The king, being delivered over to the English commissioners, was conducted under a guard to Holdenby in the county of Northampton, where he was very rigorously confined; his ancient servants being dismissed, himself debarred from visits, and all communication cut off with his friends or family.

The civil war being now over, the king absolved his followers from their allegiance, and the parliament had now no enemy to fear but their own troops. ¹⁴⁶ The army had begun to usurp the sovereign power. From this quarter their danger only arose; and it was not long before they found themselves in the same unfortunate situation to which they had reduced the king. The majority of the house were presbyterians, but the majority of the army were independents. The former, soon after the retreat of the Scots, seeing every thing reduced

Britain. reduced to obedience, proposed to disband a considerable part of the army, and send the rest over to Ireland. This was by no means relished, and Cromwell took care to heighten the disaffection. Instead of preparing to disband, therefore, the soldiers resolved to petition; and they began by desiring an indemnity, ratified by the king, for any illegal actions which they might have committed during the war. The commons voted that this petition tended to introduce mutiny, &c. and threatened to proceed against the promoters of it as enemies to the state and disturbers of the public peace. The

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A military
parliament
formed.

army now began to set up for themselves. In opposition to the parliament at Westminster, a military parliament was formed. The principal officers formed a council to represent the body of peers; the soldiers elected two men out of each company to represent the commons, and these were called the *agitators of the army*; and of this assembly Cromwell took care to be a member. The new parliament soon found many grievances to be redressed; and specified some of the most considerable. The commons were obliged to yield to every request, and the demands of the agitators rose in proportion. The commons accused the army of mutiny and sedition; the army retorted the charge, and alleged that the king had been deposed only to make way for their usurpations. Cromwell, in the mean time, who secretly conducted all the measures of the army, while he exclaimed against their violence, resolved to seize the king's person. Accordingly a party of 500 horse appeared at Holmby castle, under the command of one Joyce, originally a taylor, but now a cornet; and by this man was the king conducted to the army, who were hastening to their rendezvous at Triplo-heath near Cambridge. Next day Cromwell arrived among them, where he was received with acclamations of joy, and immediately invested with the supreme command.

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Cromwell
seizes the
king.

The commons now saw the designs of the army; but it was too late, all resistance was become vain: Cromwell advanced with precipitation, and was in a few days at St Alban's. Even submission was now to no purpose; the army still rose in their demands, in proportion as these demands were gratified, till at last they claimed a right of modelling the whole government, and settling the nation.

Cromwell began with accusing eleven members of the house, the very leaders of the presbyterian party, as guilty of high treason, and being enemies of the army. The commons were willing to protect them; but the army insisting on their dismissal, they voluntarily left the house. At last the citizens of London, finding the constitution totally overturned, and a military despotism beginning to take place, instead of the kingly one they were formerly afraid of, began to think seriously of repressing the insolence of the troops. The common council assembled the militia of the city; the works were manned; and a manifesto published, aggravating the hostile intentions of the army. Finding that the commons, in compliance with the request of the army, had voted that the city-militia should be disbanded, the multitude rose, besieged the door of the house, and obliged them to reverse that vote they had so lately passed. The assembly was, of consequence, divided into two parties; the greater part siding with the citizens; but the minority, with the two speakers at their head,

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were for encouraging the army. Accordingly the two speakers, with 62 of the members, secretly retired from the house, and threw themselves under the protection of the army, who were then at Hounslow-heath. They were received with shouts and acclamations; their integrity was extolled; and the whole force of the soldiery, to the number of 20,000 men, now moved forward to reinstate them in their places.

In the mean time, the part of the house which was left, resolved to resist the encroachments of the army. They chose new speakers, gave orders for enlisting troops, ordered the train-bands to man the lines; and the whole city boldly resolved to resist the invasion. But this resolution only held while the enemy was at a distance; for when Cromwell appeared, all was obedience and submission: the gates were opened to the general, who attended the two speakers and the rest of the members peaceably to their habitations. The eleven impeached members being accused as causes of the tumult, were expelled; and most of them retired to the continent. The mayor, sheriff, and three aldermen, were sent to the tower: several citizens, and officers of the militia, were committed to prison; the lines about the city levelled with the ground; and the command of the Tower was given to Fairfax.

It now only remained to dispose of the king, who remained a prisoner at Hampton-court. The independent army, at the head of whom was Cromwell, on one hand; and the presbyterians, in name of both houses, on the other; treated with him separately in private. He had sometimes even hopes, that, in these struggles for power, he might have been chosen mediator in the dispute; and he expected that the kingdom at last, being sensible of the miseries of anarchy, would of its own accord be hushed into its former tranquil condition. At this time he was treated with some flattering marks of distinction; he was permitted to converse with his old servants; his chaplains were permitted to attend him, and celebrate divine service their own way. But the most exquisite pleasure he enjoyed was in the company of his children, with whom he had several interviews. The meeting on these occasions was so pathetic, that Cromwell himself, who was once present, could not help being moved, and was heard to declare, that he never beheld such an affecting scene before. But these instances of respect were of no long continuance. As soon as the army had gained a complete victory over the house of commons, the king was treated not only with the greatest disrespect, but even kept in continual alarms for his own personal safety. The consequence of this was, that Charles at last resolved to withdraw himself from the kingdom. Accordingly, on the 11th of November 1647, attended only by Sir John Berkeley, Ashburnham, and Leg, he privately left Hampton-court; and his escape was not discovered till near an hour after; when those who entered his chamber, found on the table some letters directed to the parliament, to the general, and to the officer who had attended him. All night he travelled through the forest, and arrived next day at Titchfield, a seat of the earl of Southampton, where resided the countess dowager, a woman of honour, to whom the king knew he might safely entrust his person. Before he arrived at this place, he had gone to the sea-coast: and expressed great

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Sixty two
members of
parliament
join the
army.

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The rest
submit.

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Charles re-
solves to
leave the
kingdom.

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152
He is seized
and confi-
ned in the
isle of
Wight.

anxiety that a ship which he seemed to look for had not arrived. He could not hope to remain long concealed at Tichfield: the question was, what measure should next be embraced? In the neighbourhood lay the Isle of Wight, of which Hammond was governor. This man was entirely dependent on Cromwell, which was a very unfavourable circumstance: yet, because the governor was nephew to Dr Hammond the king's favourite chaplain, and had acquired a good reputation in the army, it was thought proper to have recourse to him in the present exigence, when no other rational expedient could be thought of. Ashburnham and Berkeley were dispatched to the island. They had orders not to inform Hammond of the place where the king lay concealed, till they had first obtained a promise of him not to deliver up his majesty, even though the parliament and army should require him; but restore him to his liberty, if he could not protect him. The promise would have been but a slender security: yet even without exacting it, Ashburnham imprudently, if not treacherously, brought Hammond to Tichfield; and the king was obliged to put himself into his hands, and to attend him to Carisbroke castle in the isle of Wight, where, though he was received with great demonstrations of respect and kindness, he was in reality a prisoner.

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Cromwell
in danger
from the
levellers.

While the king continued in this forlorn situation, Cromwell found himself upon the point of losing all the fruits of his former schemes, by having his own principles turned against himself. Among the Independents, who in general were for no ecclesiastical subordination, a set of men grew up called *levellers*, who disallowed all subordination whatsoever, and declared that they would have no other chaplain, king, or general, but Jesus Christ. Though this would have gone down very well with Cromwell, as long as it was only directed against his enemies, he did not so well relish it when applied to himself. Having intimation that the levellers were to meet at a certain place, he unexpectedly appeared before them at the head of his red regiment, which had hitherto been deemed invincible. He demanded, in the name of God, what these meetings and murmurings meant? he expostulated with them upon the danger and consequence of their precipitant schemes, and desired them immediately to depart. Instead of obeying, however, they returned an insolent answer; wherefore, rushing on them in a fury, he laid two of them dead at his feet. His guards dispersing the rest, he caused several of them to be hanged upon the spot, and sent others to London; and thus dissipated a faction no otherwise criminal than in having followed his own example.

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He defeats
the Scots.

Cromwell's authority was greatly increased by the last mentioned action; but it became irresistible in consequence of a new and unexpected addition to his successes. The Scots, perhaps ashamed of the reproach of having sold their king, and stimulated farther by the Independents, who took all occasions to mortify them, raised an army in his favour, and the chief command was given to the earl of Hamilton: while Langdale, who professed himself at the head of the more bigotted party who had taken the covenant, marched at the head of his separate body, and both invaded the north of England. Though these two armies amounted to above 20,000 men, yet Cromwell at the head of 8000

of his hardy veterans, feared not to give them battle. He attacked them one after another; routed and dispersed them; took Hamilton prisoner; and, following his blow, entered Scotland, the government of which he settled entirely to his satisfaction. An insurrection in Kent was quelled by Fairfax with the same ease; and nothing but success attended all this usurper's attempts.

During these contentions, the king, who was kept a prisoner at Carisbroke castle, continued to negotiate with the parliament for settling the unspeakable calamities of the kingdom. The parliament now saw no other method of destroying the military power, but to depress it by the kingly. Frequent proposals for an accommodation passed between the captive king and the commons; but the great obstacle which had all along stood in the way, still kept them from agreeing. This was the king's refusing to abolish episcopacy, though he consented to alter the liturgy. However, the treaty was still carried on with vigour, and the parliament for the first time seemed in earnest to conclude their negotiations. But all was now too late. The victorious army, with Cromwell at their head, advanced to Windsor, and with furious remonstrances began to demand vengeance on the king. The unhappy monarch had been lately sent under confinement to that place; and from thence he was now conveyed to Hurst-castle in Hampshire, opposite to the isle of Wight. The parliament in the mean time began to issue ordinances for a more effectual opposition to these military encroachments, when they were astonished by a message from Cromwell, that he intended paying them a visit next day with his whole army; and in the mean time ordering them to raise him L.40,000 on the city of London.

The commons, though destitute of all hopes of prevailing, had still the courage to resist, and to attempt in the face of the whole army to finish the treaty they had begun with the king. They had taken into consideration the whole of his concessions; and though they had formerly voted them unsatisfactory, they now renewed the consultation with great vigour. After a violent debate which lasted three days, it was carried in the king's favour by a majority of 129 against 83, that his concessions were a foundation for the houses to proceed upon in settling the affairs of the nation. This was the last attempt in his favour; for the next day colonel Pride, at the head of two regiments, blockaded the house; and seizing in the passage 41 members of the presbyterian party, sent them to a low room belonging to the house, that passed by the denomination of *Hell*. Above 160 members more were excluded; and none were allowed to enter but the most furious and determined of the Independents, in all not exceeding 60. This atrocious invasion of parliamentary rights commonly passed by the name of *Pride's purge*, and the remaining members were called the *Rump*. These soon voted, that the transactions of the house a few days before were entirely illegal, and that their general's conduct was just and necessary.

Nothing now remained, to complete the wickedness of this parliament, but to murder the king. In this assembly, therefore, composed of the most obscure citizens, and officers of the army, a committee was appointed to bring in a charge against the king; and

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Negotia-
tion be-
tween the
king and
parliament.

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Colonel
Pride's
purge.

157

Charge
against
the king
brought in.
on

Britain. on their report, a vote passed declaring it treason in a king to levy war against his parliament. It was therefore resolved, that an high court of justice should be appointed, to try his majesty for this new invented treason. For form's sake, they desired the concurrence of the few remaining lords in the upper house; but there was virtue enough left in that body unanimously to reject the proposal. The commons, however, were not to be stopped by so small an obstacle. They voted that the concurrence of the house of lords was unnecessary, and that the people were the origin of all just power. To add to their zeal, a woman of Herefordshire, illuminated by prophetic visions, desired admittance, and communicated a revelation she pretended to have received from heaven. She assured them that their measures were consecrated from above, and ratified by the sanction of the Holy Ghost. This intelligence gave them great comfort, and much confirmed them in their present resolutions.

Colonel Harrison, the son of a butcher, was commanded to conduct the king from Hurst-castle to Windsor, and from thence to London. His afflicted subjects, who ran to have a sight of their sovereign, were greatly affected at the change that appeared in his face and person. He had permitted his beard to grow; his hair was become venerably grey, rather by the pressure of anxiety than the hand of time; while the rest of his apparel bore the marks of misfortune and decay. He had long been attended by an old decrepid servant whose name was *Sir Philip Warwick*, who could only deplore his master's fate without being able to revenge his cause. All the exterior symbols of sovereignty were now withdrawn, and his attendants had orders to serve him without ceremony. He could not, however, be persuaded that his adversaries would bring him to a formal trial; but he every moment expected to be dispatched by private assassination.

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His trial.

From the 6th to the 20th of January was spent in making preparations for this extraordinary trial. The court of justice consisted of 133 persons named by the commons; but of these never above 70 met upon the trial. The members were chiefly composed of the principal officers of the army, most of them of very mean birth, together with some of the lower house, and a few citizens of London. Bradshaw a lawyer was chosen president; Coke was appointed solicitor for the people of England; Dorislaus, Steele, and Aske, were named assistants. The court sat in Westminster-hall. When the king was brought forward before the court, he was conducted by the mace-bearer to a chair placed within the bar. Though long detained a prisoner, and now produced as a criminal, he still maintained the dignity of a king. His charge was then read by the solicitor, accusing him of having been the cause of all the bloodshed which followed since the commencement of the war; after which Bradshaw directed his discourse to him, and told him that the court expected his answer.

The king began his defence with declining the authority of the court. He represented, that having been engaged in treaty with his two houses of parliament, and having finished almost every article, he expected a different treatment from what he had now received. He perceived, he said, no appearance of an upper house, which was necessary to constitute a just tribunal. He alleged that he was himself the king and

fountain of law, and consequently could not be tried by laws to which he had never given his assent; that having been intrusted with the liberties of the people, he would not now betray them by recognizing a power founded in usurpation; that he was willing, before a proper tribunal, to enter into the particulars of his defence; but that before them he must decline any apology for his innocence, lest he should be considered as the betrayer of, and not a martyr for, the constitution. Bradshaw, in order to support the authority of the court, insisted, that they had received their authority from the people, the source of all right. He pressed the king not to decline the authority of the court that was delegated by the commons of England, and interrupted and over-ruled him in his attempts to reply. In this manner the king was three times produced before the court, and as often persisted in declining its jurisdiction. The fourth and last time he was brought before this self-created tribunal, as he was proceeding thither, he was insulted by the soldiers and the mob, who cried out, "Justice! justice! Execution! execution!" but he continued undaunted. His judges having now examined some witnesses, by whom it was proved that the king had appeared in arms against the forces commissioned by parliament, they pronounced sentence against him. He seemed very anxious at this time to be admitted to a conference with the two houses, and it was supposed that he intended to resign the crown to his son; but the court refused compliance, and considered his request as an artifice to delay justice.

The behaviour of Charles under all these instances of ¹⁵⁹low-bred malice was great, firm, and equal. In going through the hall from this execrable tribunal, the soldiers and rabble were again instigated to cry out, Justice and execution! They reviled him with the most bitter reproaches. Among other insults, one miscreant presumed to spit in the face of his sovereign. He patiently bore their insolence: "Poor souls (cried he), they would treat their generals in the same manner for sixpence." Those of the populace who still retained the feelings of humanity expressed their sorrow in sighs and tears. A soldier more compassionate than the rest could not help imploring a blessing on his royal head. An officer overhearing him, struck the honest centinel to the ground before the king; who could not help saying, that the punishment exceeded the offence.

At his return to Whitehall, Charles desired permission of the house to see his children, and to be attended in his private devotions by Dr Juxon late bishop of London. These requests were granted, and also three days to prepare for execution. Every night between his sentence and execution, the king slept sound as usual, though the noise of the workmen employed in framing the scaffold continually resounded in his ears. The fatal ¹⁶⁰morning being at last arrived, he rose early; and calling one of his attendants, he bad him employ more than usual care in dressing him, and preparing him for so great a solemnity. The street before Whitehall was the place destined for his execution; for it was intended that this should increase the severity of his punishment. He was led through the banqueting-house to the scaffold adjoining to that edifice, attended by his friend and servant bishop Juxon, a man of the same mild and steady virtues with his master. The scaffold, which was covered

Britain.

covered with black, was guarded by a regiment of soldiers under the command of colonel Tomlinson; and on it were to be seen the block, the ax, and two executioners in masks. The people, in crowds, stood at a greater distance. The king surveyed all these solemn preparations with calm composure; and, as he could not expect to be heard by the people at a distance, he addressed himself to the few persons who stood round him. He there justified his own innocence in the late fatal wars: he observed, that he had not taken arms till after the parliament had shown him the example; and that he had no other object in his warlike preparations, than to preserve that authority entire which had been transmitted to him by his ancestors. But, though innocent towards his people, he acknowledged the equity of his execution in the eyes of his Maker: he owned that he was justly punished for having consented to the execution of an unjust sentence against the earl of Strafford. He forgave all his enemies; exhorted the people to return to their obedience, and acknowledge his son as his successor; and signified his attachment to the Protestant religion as professed by the church of England. So strong was the impression made by his dying words on those who could hear him, that colonel Tomlinson himself, to whose care he had been committed, acknowledged himself a convert. At one blow his head was severed from his body. The other executioner then, holding up the head, exclaimed, "This is the head of a traitor."

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Grief of
the nation
on that ac-
count.

It is impossible to describe the grief, indignation, and astonishment, which took place not only among the spectators, who were overwhelmed with a flood of sorrow, but throughout the whole nation, as soon as the report of this fatal execution was conveyed to them. Each blamed himself either with active disloyalty to the king, or a passive compliance with his destroyers. The very pulpits that used to resound with insolence and sedition were now bedewed with tears of unfeigned repentance; and all united in their detestation of those dark hypocrites who, to satisfy their own enmity, involved a whole nation in the guilt of treason.—Charles was executed on the 30th of January 1649, in the 49th year of his age, and 24th of his reign. He was of a middling stature, robust, and well-proportioned. His visage was pleasant, but melancholy; and it is probable that the continual troubles in which he was involved might have made that impression on his countenance.

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Piety of
the king
in his last
moments.

It being remarked, that the king, the moment before he stretched out his neck to the executioner, had said to Juxon, with a very earnest accent, the single word REMEMBER, great mysteries were supposed to be concealed under that word; and the generals vehemently insisted with the prelate that he should inform them of the king's meaning. Juxon told them, that the king, having frequently charged him to inculcate on his son the forgiveness of his murderers, had taken this opportunity in the last moment of his life, when his commands, he supposed, would be regarded as sacred and inviolable, to reiterate that desire; and that his mild spirit thus terminated its present course by an act of benevolence to his greatest enemies.

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Dissolution
of the Eng-
lish monar-
chy.

The dissolution of the monarchy in England soon followed the death of the monarch. When the peers met on the day appointed in their adjournment, they

entered upon business; and sent down some votes to the commons, of which the latter deigned not to take the least notice. In a few days after, the commons voted, that the house of lords was useless and dangerous; for which reason it was abolished. They voted it high treason to acknowledge Charles Stuart, son of the late king, as successor to the throne. A great seal was made; on one side of which were engraven the arms of England and Ireland, with this inscription, "The great seal of England." On the reverse was represented the house of commons sitting, with this motto: "On the first year of freedom, by God's blessing restored, 1649." The forms of all public business were changed from being transacted in the king's name, to that of the *keepers of the liberties of England*. The court of king's bench was called the court of *public bench*. Nay, so cautious on this head, it is said, were some of the republicans, that, in reciting the Lord's prayer, they would not say, "thy kingdom," but "thy *commonwealth*, come." The king's statue in the exchange was thrown down; and on the pedestal these words were inscribed: *Exit tyrannus, regum ultimus*; "The tyrant is gone, the last of the kings." The commons, it is said, intended to bind the princess Elizabeth apprentice to a button-maker; the duke of Gloucester was to be taught some other mechanical employment: but the former soon died of grief, as is supposed, for her father's tragical end; the latter was sent beyond sea by Cromwell.

The commons next proceeded to punish those who had been most remarkable for their attachment to their late sovereign. The duke of Hamilton, lord Capel, and the earl of Holland, were condemned and executed; the earl of Norwich and Sir John Owen were also condemned and afterwards pardoned. These executions irritated the Scots: their loyalty began to return; and the insolence of the independents, with their victories, inflamed them still more. They determined, therefore, to acknowledge prince Charles for their king, but at the same time to abridge his power by every limitation which they had attempted to impose on his father.

Charles, after the death of his father, having passed some time at Paris, and finding no likelihood of assistance from that quarter, was glad to accept of any conditions. The Scots, however, while they were thus professing loyalty to their king, were nevertheless cruelly punishing his adherents. Among others, the brave marquis of Montrose was taken prisoner, as he endeavoured to raise the Highlanders in the royal cause; and being brought to Edinburgh, was hanged on a gibbet 30 feet high, then quartered, and his limbs stuck up in the principal towns of the kingdom. Yet, notwithstanding all this severity, Charles ventured into Scotland, and had the mortification to enter the gate of Edinburgh where the limbs of that faithful adherent were still exposed.

165
Charles II.
invited into
Scotland.

The young king soon found that he had only exchanged his exile for imprisonment. He was surrounded and incessantly importuned by the fanatical clergymen, who having brought royalty under their feet, were resolved to keep it still subservient, and to trample upon it with all the contumely of upstarts. Charles pretended to give ear to their discourses; but, however, made an attempt

166
His hard
usage there.

Britain. attempt to escape. He was overtaken and brought back; when he owned the greatness of his fault, and testified his repentance for what he had done. Cromwell, in the mean time, who had been appointed by the parliament to command the army in Ireland, prosecuted the war in that kingdom with his usual success. He had to encounter the royalists commanded by the duke of Ormond, and the native Irish led on by O'Neal. These troops he quickly overcame; and most of the towns, intimidated by his cruelty, opened their gates at his approach. He was on the point of reducing the whole kingdom, when he was recalled by the parliament to defend his country against the Scots, who had raised a considerable army in support of the royal cause.

168
Infatuation
of the Scots.

On the return of Cromwell to England, he was chosen commander in chief of the parliamentary forces, in the room of Fairfax, who declined opposing the presbyterians. The new general immediately set forward for Scotland with an army of 16,000 men, where he was opposed by general Lesly, who formed an excellent plan for his own defence. This prudent commander, knowing his men to be inferior in valour and discipline, however superior in numbers, to those of Cromwell, kept himself carefully in his intrenchments. At last Cromwell was drawn into a very disadvantageous post near Dunbar, where his antagonist waited deliberately to take advantage of him. From this imminent danger, however, he was delivered by the madness of the Scots clergy. They, it seems, had been wrestling in prayer with the Lord night and day, and at last fancied that they had obtained the superiority. Revelations were made them, that the heretical army, together with Agag their general, would be delivered into their hands. Upon the assurances of these visions, they obliged their general to descend into the plain, and give the English battle. When Cromwell saw this mad action, he assured his followers, that the Lord had delivered them into his hands, and ordered his army to sing psalms, as if already certain of victory. The Scots, though double the number of the English, were soon put to flight, and pursued with great slaughter, while Cromwell did not lose in all above 40 men.

169
They are
defeated by
Cromwell.

After this defeat, Charles put himself at the head of the remains of his army; and these he further strengthened by the royalists, who had been for some time excluded from his service by the covenanters. He was so closely pursued by Cromwell, however, that he soon found it impossible to maintain his army. Observing, therefore, that the way was open to England, he immediately directed his march towards that country, where he expected to be reinforced by all the royalists in that part of the kingdom. In this, however, he was deceived: the English, terrified at the name of his opponent, dreaded to join him. But his mortification was greatly increased, when at Worcester he was informed, that Cromwell was marching with hasty strides from Scotland with an army of 40,000 men. This news was scarcely arrived, when Cromwell himself was there. He fell upon the town on all sides: the whole Scots army was either killed or taken prisoners; and the king himself, having given many proofs of personal valour, was obliged to fly.

170
Charles de-
feated at
Worcester.

The young king now entered upon a scene of ad-

ventures the most romantic that can be imagined. After his hair was cut off, the better to disguise his person, he worked for some days in the habit of a peasant, cutting faggots in a wood. He next made an attempt to retire into Wales, under the conduct of one Pendrel, a poor farmer, who was sincerely attached to his cause. In this attempt, however, he was disappointed; every pass being guarded to prevent their escape. Being obliged to return, he met one colonel Careless, who had escaped the carnage at Worcester. In his company the king was obliged to climb a spreading oak; among the thick branches of which they spent the day together, while they heard the soldiers of the enemy in pursuit of them below. From thence he passed with imminent danger, feeling all the varieties of famine, fatigue, and pain, till he arrived at the house of colonel Lane, a zealous royalist in Staffordshire. There he deliberated about the means of escaping into France; and Bristol being supposed the properest port, it was resolved that he should ride thither before this gentleman's sister, on a visit to one Mrs Norton, who lived in the neighbourhood of that city. During this journey, he every day met with persons whose faces he knew, and at one time passed through a whole regiment of the enemy's army.

When they arrived at Mrs Norton's, the first person they saw was one of his own chaplains sitting at the door, and amusing himself with seeing people play at bowls. The king, after having taken proper care of his horse in the stable, was shown to an apartment which Mrs Lane had provided for him, as it was said he had the ague. The butler, however, being sent to him with some refreshment, no sooner beheld his face, which was very pale with anxiety and fatigue, than he recollected his king and master; and falling on his knees, while the tears streamed down his cheeks, cried out, "I am rejoiced to see your majesty." The king was alarmed; but made the butler promise that he would keep the secret from every mortal, even from his master; and the honest servant punctually obeyed him.

No ship being found that would for a month set sail from Bristol either for France or Spain, the king was obliged to go elsewhere for a passage. He therefore repaired to the house of colonel Wyndham in Dorsetshire, where he was cordially received. His mother, a venerable matron, seemed to think the end of her life nobly rewarded in having it in her power to give protection to her king. She expressed no dissatisfaction at having lost three sons and one grandchild in the defence of his cause, since she was honoured in being instrumental in his own preservation.

Pursuing from thence his journey to the sea-side, he once more had a very narrow escape at a little inn, where he set up for the night. The day had been appointed for a solemn fast; and a fanatical weaver, who had been a soldier in the parliamentary army, was preaching against the king in a little chapel fronting the house. Charles, to avoid suspicion, was himself among the audience. It happened that a smith, of the same principles with the weaver, had been examining the horses belonging to the passengers, and came to assure the preacher, that he knew by the fashion of the shoes, that one of the strangers horses came from the north. The preacher immediately affirmed, that this horse could belong to no other than Charles Stuart, and

Britain.
171
His adven-
ture after-
wards.

Britain. and instantly went with a constable to search the inn. But Charles had taken timely precautions, and left the inn before the constable's arrival.

172
He escapes
to France.

At Shoredam, in Suffex, a vessel was at last found, in which he embarked. He was known to so many, that if he had not set sail at that critical moment, it had been impossible for him to escape. After 41 days concealment, he arrived safely at Feschamp in Normandy. No less than 40 men and women had at different times been privy to his escape.

173
Cromwell
treats Scot-
land as a
conquered
province.

Cromwell in the mean time returned in triumph; and his first care was to depress the Scots, on account of their having *withstood the work of the gospel* as he called it. An act was passed for abolishing royalty in Scotland, and annexing that kingdom as a conquered province to the English commonwealth. It was empowered, however, to send some members to the English parliament. Judges were appointed to distribute justice; and the people of that country, now freed from the tyranny of the ecclesiastics, were not much dissatisfied with the government.

174
War with
the Dutch.

All parts of the British dominions being now reduced to perfect subjection to the parliament, they next resolved to chastise the Dutch, who had given but very slight causes of complaint. It happened that one Dr Dorilaus, who was of the number of the late king's judges, being sent by the parliament as their envoy to Holland, was assassinated by one of the royal party who had taken refuge there. Some time after, also, Mr St John, appointed their ambassador to that court, was insulted by the friends of the prince of Orange. These were thought sufficient reasons for a declaration of war against the Hollanders by the commonwealth of England. The parliament's chief dependence lay in the activity and courage of Blake their admiral; who, though he had not embarked in naval command till late in life, yet surpassed all that went before him in courage and dexterity. On the other side, the Dutch opposed to him their famous admiral Van Tromp, to whom their country never since produced an equal. Many were the engagements between these celebrated admirals, and various was their success. Several dreadful encounters served rather to show the excellency of the admirals than to determine their superiority. At last the Dutch, who felt many great disadvantages by the loss of their trade, and by the total suspension of their fisheries, were willing to treat of a peace. The parliament, however, gave but a very unfavourable answer. They studied to keep their navy on foot as long as they could; rightly judging, that while the force of the nation was exerted by sea, it would diminish the formidable power of Cromwell by land.

175
Cromwell
resolves to
seize the
sovereign-
ty.

This great aspirer, however, quickly perceived their designs; and therefore, secure in the attachment of the army, resolved to seize the sovereign power. He persuaded the officers to present a petition for payment of arrears, and redress of grievances. His orders were obeyed: a petition was drawn up and presented, in which the officers, after demanding their arrears, desired the parliament to consider how many years they had sat, and what pretensions they had formerly made of their designs to new-model the house, and establish freedom on its broadest basis. They alleged, that it was now full time to give place to others; and however meritorious their actions might have been, yet the rest

of the nation had some right, in their turn, to manifest their patriotism in defence of their country. The house was highly offended: they appointed a committee to prepare an act, ordaining that all persons who presented such petitions for the future should be deemed guilty of high treason. To this the officers made a very warm remonstrance, and the parliament as angry a reply. Cromwell, being informed of this altercation, started up in the utmost seeming fury, and turning to major Vernon, cried out, "that he was compelled to do a thing that made the very hair of his head stand on end." Then, hastening to the house with 300 soldiers, and with the marks of violent indignation on his countenance, he entered, took his place, and attended to the debates for some time. When the question was ready to be put, he suddenly started up, and began to load the parliament with the vilest reproaches for their tyranny, ambition, oppression, and robbery of the public. Upon which, stamping with his foot, which was the signal for the soldiers to enter, the place was immediately filled with armed men. Then, addressing himself to the members, "For shame (said he), get you gone. Give place to honest men; to those who will more faithfully discharge their trust. You are no longer a parliament; I tell you, you are no longer a parliament; the Lord has done with you." Sir Harry Vane exclaiming against this conduct, "Sir Harry! (cries Cromwell with a loud voice), O Sir Harry Vane! The Lord deliver me from Sir Harry Vane!" "Taking hold then of one of the members by his cloak, "Thou art a whoremaster," cries he; to another, "Thou art an adulterer;" to a third, "Thou art a drunkard;" to a fourth, "Thou art a glutton, &c." "It is you (continued he to the members), that have forced me upon this. I have fought the Lord night and day, that he would rather slay me than put me upon this work." Then pointing to the mace, "Take away that bauble," cried he: after which, turning out all the members, and clearing the hall, he ordered the doors to be locked; and putting the keys in his pocket, returned to Whitehall.

Thus the whole civil and military power centered in Cromwell, who by this bold transaction became, in effect, king of Great Britain, with uncontrollable authority. Being willing, however, to amuse the people with the form of a commonwealth, he proposed to give his subjects a parliament; but such an one as should be altogether obedient to his commands. For this purpose it was decreed, that the sovereign power should be vested in 144 persons, under the denomination of a parliament; and he undertook to make the choice himself. The persons pitched upon were the lowest, meanest, and most ignorant among the citizens, and the very dregs of the fanatics. To go further than others in the absurdities of fanaticism was the chief qualification upon which each of these valued himself. Their very names, borrowed from scripture, and rendered ridiculous by their misapplication, served to show their excess of folly. One of them particularly, who was called *Praise God Barebone*, a canting leather-feller, gave his name to this odd assembly, and it was called *Barebone's Parliament*. They were chiefly composed of Antinomians; a sect that, after receiving the spirit, supposed themselves incapable of error; and the fifth-monarchy-men, who every hour expected Christ's

second

Britain. second coming on earth. They began by choosing eight of their tribe to seek the Lord in prayer, while the rest calmly sat down to deliberate upon the suppression of the clergy, the universities, and courts of justice; and instead of all this, it was their intent to substitute the law of Moses.

178 **Who are again turned out.** It was impossible such a legislature as this could stand; even the vulgar began to exclaim against it, and Cromwell himself to be ashamed of their absurdities. He had carefully chosen many persons among them who were entirely devoted to his interests, and these he commanded to dismiss the assembly. These accordingly met by concert earlier than the rest of their fraternity; and observing to each other that this parliament had sat long enough, they hastened to Cromwell, with Rouse their speaker at their head, and into his hands resigned the authority with which he had invested them. Cromwell accepted their resignation with pleasure: but being told that some of their number were refractory, he sent colonel White to clear the house of such as ventured to remain there. They had placed one Moyer in the chair by the time that the colonel had arrived; and he being asked by the colonel, What they did there? Moyer replied very gravely, That they were seeking the Lord. "Then you may go elsewhere (cried White); for, to my certain knowledge, the Lord hath not been here these many years."

179 **Cromwell declared protector.** The shadow of a parliament being thus dissolved, the officers, by their own authority, declared Cromwell protector of the commonwealth of England. The mayor and aldermen were sent for to give solemnity to his appointment, and he was instituted into his new office at Whitehall, in the palace of the kings of England. He was to be addressed by the title of *Highness*; and his power was proclaimed in London, and other parts of the kingdom. It was now, indeed, in a great measure necessary that some person should take the supreme command; for affairs were brought into such a situation, by the furious animosities of the contending parties, that nothing but absolute power could prevent a renewal of former bloodshed and confusion.

180 **He settles the government.** The government of the kingdom was adjusted in the following manner. A council was appointed, which was not to exceed 21, nor to be under 13 persons. These were to enjoy their offices for life, or during good behaviour; and, in case of a vacancy, the remaining members named three, of whom the protector chose one. The protector was appointed the supreme magistrate of the commonwealth, with such powers as the king was possessed of. The power of the sword was vested in him jointly with the parliament when sitting, or with the council at other times. He was obliged to summon a parliament once every three years, and to allow them to sit five months without adjournment. A standing army was established of 20,000 foot and 10,000 horse; and funds were assigned for their support. The protector enjoyed his office for life; and on his death, his place was to be supplied by the council. Of all these clauses the standing army was sufficient for Cromwell's purpose; for, while possessed of that instrument, he could mould the rest of the constitution to his pleasure at any time. He chose his council from among his officers, who had been the companions of his dangers and victories, to each of whom he assigned a pension of 1000 l. a-year. He took care to have his troops,

upon whose fidelity he depended for support, paid a month in advance; the magazines were also well provided, and the public treasure managed with frugality and care; while his activity, vigilance, and resolution, were so well exerted, that he discovered every conspiracy against his person, and every plot for an insurrection, before they took effect.

Thus Cromwell continued to govern, though without assuming the title of *king*, in as absolute a manner as the most despotic prince in Europe. As he was feared at home, so he made himself respected abroad. The Dutch, having been humbled by repeated defeats, were obliged to sue for peace. Cromwell obliged them to pay deference to the British flag. He compelled them to abandon the interests of the king, to pay 85,000 l. as an indemnification for former expences, and to restore to the English East India company a part of those dominions which they had been dispossessed of by the Dutch during the former reign. The ministry of France thought proper to pay deference to the imperious character of the protector; and he having lent that court a body of 6000 men to attack the Spanish dominions in the Netherlands, who obtained a signal victory, the French put Dunkirk into his hands as a reward for his attachment. By means of the celebrated admiral Blake† he humbled Spain prodigiously, as also the Algerines and Tunefines. Penn and Venables, two other admirals, made an attempt on the island of Hispaniola; but failing of this, they steered to Jamaica, which was surrendered to them without a blow. Yet so little was thought of the importance of this conquest, that, on their return, the two admirals were committed to the tower, on account of the failure of the principal object of their equipment.

It is not to be supposed that a numerous standing army could be maintained, and so many foreign wars carried on, without incurring extraordinary expences. The protector's revenues were so much exhausted, that he was obliged to have recourse to methods which he probably would not have chosen, had he not been driven to them by necessity. One or two conspiracies entered into by the royalists, which were detected and punished, served him as a pretence to lay a heavy tax upon all that party, of the tenth penny on all their possessions. In order to raise this oppressive imposition, ten major-generals were instituted, who divided the whole kingdom into so many military jurisdictions. These men had power to subject whom they pleased to this tax, and to imprison such as denied their jurisdiction. Under colour of these powers they exercised the most arbitrary authority; the people had no protection against their exactions; the very mask of liberty was thrown off, and all property was at the disposal of a military tribunal. It was in vain that the nation cried out for a free parliament. Cromwell assembled one in consequence of their clamours; but as speedily dissolved it when he found it refractory to his commands. At last, as parliaments were always held in such estimation by the people, he resolved to give them one, but such should be entirely of his own choosing, and chiefly composed of his creatures. Left any of a different complexion should enter the house, guards were placed at the door, and none admitted but such as produced a warrant from his council.

The principal design of convening this assembly was, that

Britain.

181

His vigorous administration.

See the article Blake.

182

Jamaica conquered.

183

His arbitrary methods of procuring money.

184

He convened a parliament.

Britain.
185
Who offer
him the
crown.

that they should offer him the crown, with the title of king, and all the other ensigns of royalty. His creatures, therefore, took care to insinuate the confusion there was in legal proceedings without the name of a king; that no man was acquainted with the extent or limits of the present magistrates authority, but those of a king had been well ascertained by the experience of ages. The motion was at last formally made in the house, easily carried through, and nothing was now wanting but Cromwell's own consent to have his name enrolled among the kings of England. This consent, however, he never had resolution enough to give. His doubts continued for some days; and the conference carried on with the members who made him the offer, so far as it is on his part intelligible, seems to argue that he was desirous of being compelled to accept the offer: however, the conference ended in his total refusal.

186
Which he
refuses.

187
His misera-
ble situa-
tion,

With all these proffered honours, and with all his despotic power, the situation of Cromwell was far from being enviable. Perhaps no situation, however mean, or loaded with contempt, could be more truly distressful than his, at the time the nation was loading him with congratulations and addresses. He had at last rendered himself hateful to every party, and he owed his safety to their mutual hatred and diffidence of one another. His arts of dissimulation were exhausted; none could be deceived by them; even those of his own party and principles disdaining the use to which he had converted his zeal and professions. Though the whole nation silently detested his administration, he had not been completely wretched if he could have found domestic consolation. But even his own family had embraced republican principles with so much vehemence, that they could not without indignation behold him invested with uncontrollable power; and Mrs Claypole, his favourite daughter, upbraided him, on her death-bed, with all the crimes which led him to trample on the throne. To add to all this, not only were conspiracies formed against him, but he was at last taught, upon reasoning principles, that his death was not only desirable, but his assassination would be meritorious. A book was published by colonel Titus, a man who had formerly been attached to his cause, entitled *Killing no murder*. Of all the pamphlets that appeared at that time, or perhaps of those that have since appeared, this was the most eloquent and masterly. Cromwell read it, and is said never to have smiled afterwards.

188
And death.

189
Richard
Cromwell
protector.

The usurper now found, that the grandeur to which he had sacrificed his former tranquillity was only an inlet to fresh inquietudes. He was haunted with perpetual fears of assassination. He wore armour under his clothes, and always kept pistols in his pockets. His aspect was clouded by a settled gloom, and he regarded every stranger with suspicion. He was always attended by a numerous guard, and travelled in a hurry. He never returned from any place by the road he went; and never slept above three nights together in the same chamber. At last he was delivered from this life of horror and anxiety by a tertian ague, of which he died September 3d 1658, after having usurped the government nine years.

Oliver Cromwell was succeeded in his office of protector by his son Richard, who immediately called a parliament. To this assembly the army presented a re-

monstrance, desiring some person for their general in whom they could confide. The house voted such meetings and remonstrances unlawful: upon which the officers, surrounding Richard's house, forced him to dissolve the parliament; and soon after he signed an abdication of the government. His younger brother Henry, who had been appointed to the command in Ireland, followed Richard's example, and resigned his commission without striking a blow.

The officers, thus left at liberty, resolved to restore the *rump parliament* as it was called, consisting of that remnant of a parliament which had condemned Charles. They were no sooner reinstated in their authority, however, than they began to humble the army by cashiering some of the officers, and appointing others on whom they could have more dependence. The officers immediately resolved to dissolve the assembly. Lambert, one of the general officers, drew up a chosen body of troops; and placing them in the streets which led to Westminster-hall, when the speaker Lenthall proceeded in his carriage to the house, he ordered the horses to be turned, and very civilly conducted him home. The other members were likewise intercepted; and the army returned to their quarters to observe a solemn fast, which generally either preceded or attended their outrages. A committee was then elected, of 23 persons; of whom seven were officers. These they pretended to invest with sovereign authority; and a military government was established, which gave the nation a prospect of endless servitude and tyranny without redress.

Upon hearing that the officers had by their own authority dissolved the parliament, general Monk, who was then in Scotland with 8000 veteran troops, protested against the measure, and resolved to defend the national privileges. As soon as he put his army in motion, he found himself eagerly fought after by all parties; but so cautious was he of declaring his mind, that, till the very last, it was impossible to know which side he designed to take. A remarkable instance of this cautious behaviour was, that, when his own brother came to him with a message from lord Granville in the name of the king, he refused all conversation with him upon hearing that he had told his errand to Mr Price, the general's own chaplain, and a man of known probity and honour.

Hearing that the officers were preparing an army to oppose him, Monk amused them with negotiations; and the people, finding themselves not entirely defenceless, began to declare for a free parliament. The *Rump*, finding themselves invited also by the navy and part of the army, again ventured to resume their seats, and to thunder votes in their turn against the officers and that party of the army by which they had been ejected. Without taking any notice of Lambert, they sent orders to the troops to repair immediately to the garrisons appointed for them. The soldiers obeyed; and Lambert at last found himself deserted by his whole army. Monk in the mean time proceeded with his army to London. The gentry, on his march, flocked round him with addresses, expressing their desire of a new parliament; but that general, still continuing his inflexible taciturnity, at last came to St Albans, within a few miles of the capital, leaving all the world in doubt as to his motives and designs. Here he sent the parliament a message, desiring them to remove such

forces

Britain. forces as remained in London to country quarters. Some of the regiments willingly obeyed this order; and such as did not, Monk turned out by force: after which he took up his quarters with his army in Westminster. The house voted him thanks for his services: he desired them to call a free parliament; and this soon inspired the citizens to refuse submission to the present government. They resolved to pay no taxes until the members formerly excluded by colonel Pride should be replaced. For this they were punished by Monk, at the desire of the parliament. He arrested 11 of the most obnoxious of the common-council; broke the gates and portcullises; and, having exposed it to the scorn and contempt of all who hated it, he returned in triumph to his quarters at Westminster. The next day, however, he made an apology for this conduct, and promised for the future to co-operate with the mayor and common-council in such schemes as they should approve.

196 Monk takes up his quarters at Westminster.
197 Punishes the city of London.
198 Restores the secluded members of parliament.

The commons were now greatly alarmed. They tried every method to gain off the general from his new alliance. Some of them even promised to invest him with the dignity of supreme magistrate, and to support his usurpation. But Monk was too just, or too wise, to hearken to such wild proposals; he resolved to restore the secluded members, and by their means to bring about a new election.

The restoration of the expelled members was easily effected; and their number was so much superior to that of the *Rump*, that the chiefs of this last party now thought proper to withdraw in their turn. The restored members began with repealing all those orders by which they had been expelled. They renewed and enlarged the general's commission; fixed a proper stipend for the support of the fleet and army; and, having passed these votes, they dissolved themselves, and gave orders for the immediate assembling of a new parliament. Mean while, Monk new-modelled his army to the purposes he had in view. Some officers, by his direction, presented him with an address, in which they promised to obey implicitly the orders of the ensuing parliament. He approved of this engagement, which he ordered to be signed by all the different regiments; and this furnished him with a pretence for dismissing all the officers by whom it was rejected.

In the midst of these transactions, Lambert, who had been confined in the Tower, escaped from his prison, and began to raise forces; and as his activity and principles were sufficiently known, Monk took the earliest precautions to oppose his measures. He dispatched against him colonel Ingoldsby, with his own regiment, before Lambert had time to assemble his dependents. That officer had taken possession of Daventry with four troops of horse: but the greater part of them joined Ingoldsby; to whom he himself surrendered, not without exhibiting strong marks of pusillanimity.

All this time Monk still persisted in his reserve; nor would he intrust his secret intentions with any person, except one Morrice, a gentleman of Devonshire. He was of a sedentary and studious disposition; and with him alone did the general deliberate on the great and dangerous enterprise of the restoration. Sir John Granville, who had a commission from the king, applied for access to the general; but he was desired to communicate his business to Morrice. Granville refused, though

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twice urged, to deliver his message to any but the general himself: so that Monk, now finding he could depend on this minister's secrecy, opened to him his whole intentions; but, with his usual caution, refused to commit any thing to paper. In consequence of these, the king left the Spanish territories, where he very narrowly escaped being detained at Breda by the governor, under pretence of treating him with proper respect and formality. From thence he retired to Holland, where he resolved to wait further advice.

The new parliament being assembled, Sir Harbottle Grimstone was chosen speaker, a man known to be a royalist in his heart. The affections of all were turned towards the king; yet such were their fears, and such dangers attended a freedom of speech, that no one dared for some days to make any mention of his name. At length Monk gave directions to Annesly, president of the council, to inform them that one Sir John Granville, a servant of the king's, had been sent over by his majesty, and was now at the door with a letter to the house of commons. This message was received with the utmost joy. Granville was called in, the letter read, and the king's proposals immediately accepted of. He offered a general amnesty to all persons whatsoever, and that without any exceptions but what should be made by parliament. He promised to indulge scrupulous consciences with liberty in matters of religion; to leave to the examination of parliament the claims of all such as possessed lands with contested titles; to confirm all these concessions by act of parliament; to satisfy the army under general Monk with respect to their arrears, and to give the same rank to his officers when they should be enlisted in the king's army.

In consequence of this good agreement between king and parliament, Montague the English admiral waited on his majesty to inform him that the fleet expected his orders at Scheveling. The duke of York immediately went on board, and took the command as lord high admiral. The king embarked, and landing at Dover, was received by the general, whom he tenderly embraced. He entered London in 1660, on the 29th of May, which was his birth-day; and was attended by an innumerable multitude of people, who testified their joy by the loudest acclamations.

Charles II. was 30 years of age at the time of his restoration. Being naturally of an engaging countenance, and possessed of an open and affable disposition, he was the favourite of all ranks of his subjects. They had now felt the miseries of anarchy, and in proportion to these miseries was the satisfaction they felt on the accession of their young monarch. His first measures were calculated to give universal satisfaction. He seemed desirous of losing the memory of past animosities, and of uniting every party in affection for their prince and country. He admitted into his council the most eminent men of the nation, without regard to former distinctions. The presbyterians shared this honour equally with the royalists. Calamy and Baxter, presbyterian clergymen, were even made chaplains to the king. Admiral Montague was created earl of Sandwich, and general Monk duke of Albemarle. Morrice, the general's friend, was created secretary of state. But what gave the greatest contentment to the nation was the judicious choice which the king at first made of his principal ministers and favourites. Sir Edward Hyde,

4 G

created

Britain.

200

Charles II. leaves Spain.

201

His message to the parliament.

202

He lands in England.

203

His first measures popular.

²⁰⁴ Britain. created earl of Clarendon, was prime minister and chancellor. The marquis, created duke of Ormond, was steward of the household; the earl of Southampton high-treasurer; Sir Edward Nicholas secretary of state. These men, united together in the strictest friendship, and combining in the same laudable inclinations, supported each others credit, and pursued the interests of the public.

The parliament having been summoned without the king's consent, received at first only the title of a *convention*; and it was not till after an act passed for that purpose, that they were acknowledged by the name of *parliament*. Both houses owned the guilt of the former rebellion, and gratefully received in their own name, and in that of all the subjects, his majesty's gracious pardon and indemnity. The king had before promised an indemnity to all criminals, but such as should be excepted by parliament: he now issued a proclamation, declaring, that such of the late king's judges as did not surrender themselves within 14 days should receive no pardon. Nineteen surrendered themselves; some were taken in their flight; others escaped beyond sea. The peers seemed inclined to great severity on this occasion; but were restrained by the king, who in the most earnest terms pressed the act of general indemnification.

²⁰⁴ Regicides punished.

After repeated solicitations, the act of indemnity passed both houses, with the exception of those who had an immediate hand in the king's death. Even Cromwell, Ireton, and Bradshaw, though dead, were considered as proper objects of resentment: their bodies were dug from their graves; dragged to the place of execution; and, after hanging some time, buried under the gallows. Of the rest who sat in judgment on the late monarch's trial, some were dead, and some thought worthy of pardon. Ten only, out of 80, were doomed to immediate destruction; and these were enthusiasts who had all along acted from principle, and who, in the general spirit of rage excited against them, showed a fortitude that would have done honour to a better cause.

This was all the blood that was shed at the restoration. The rest of the king's judges were reprimed, and afterwards dispersed into several prisons. The army was disbanded, that had for so many years governed the nation; prelacy, and all the ceremonies of the church of England, were restored; at the same time that the king pretended to preserve the air of moderation and neutrality. In fact, with regard to religion, Charles, in his gayer hours, was a professed deist; but in the latter part of his life he showed an inclination to the Catholic persuasion, which he had strongly imbibed in his infancy and exile.

²⁰⁵ Death of the duke of Gloucester.

On the 13th of September this year, died the young duke of Gloucester, a prince of great hopes. The king was never so deeply affected by any incident in his life. The princess of Orange, having come to England, in order to partake of the joy attending the restoration of her family, with whom she lived in great friendship, soon after sickened and died. The queen-mother paid a visit to her son, and obtained his consent to the marriage of the princess Henrietta with the duke of Orleans, brother to the French king. The parliament having met on the 6th of November, and carried on business with the greatest unanimity and dis-

²⁰⁶ Parliament dissolved.

patch, were dissolved by the king on the 29th of December 1660.

During the reign of Charles II. the spirit of the people seemed to take a turn quite opposite to that in the time of Charles I. The latter found his subjects animated with a ferocious though ignorant zeal for liberty. They knew not what it was to be free, and therefore imagined that liberty consisted in throwing off entirely the royal authority. They gained their point: the unhappy monarch was dethroned and murdered; but instead of liberty, they found themselves involved in much worse tyranny than before. Being happily freed from this tyranny by the restoration, they ran into the contrary extreme; and instead of an unbounded spirit of opposition, there was nothing now to be found but as unbounded a spirit of submission; and through the slavish submissions and concessions of the people in this reign, Charles found means to render himself at last almost quite absolute, and to govern without requiring, or indeed without having any occasion for parliament.

A like revolution took place with regard to religious matters. During the former reigns a spirit of the most gloomy enthusiasm had overspread the whole island, and men imagined that the Deity was only to be pleased by their denying themselves every social pleasure, and refusing every thing that tended to make life agreeable. The extreme hypocrisy of Cromwell and his associates, and the absurd conduct of others, showed that this was not religion; but, in avoiding this error, they ran into one equally dangerous; and every thing religious or serious was discountenanced. Nothing but riot and dissipation took place every where. The court set them the example; nothing but scenes of gallantry and festivity were to be seen; the horrors of the late war became the subject of ridicule; the formality of the sectaries was displayed on the stage, and even laughed at from the pulpit. In short, the best mode of religion now was to have as little as possible; and to avoid not only the hypocrisy of the sectaries, but even the common duties of morality.

In the midst of this riot and dissipation, the old and faithful followers of the royal family were left unwarded. Numbers who had fought both for the king and his father, and who had lost their whole fortunes in his service, still continued to pine in want and oblivion; while in the mean time their persecutors, who had acquired fortunes during the civil war, were permitted to enjoy them without molestation. The wretched royalists petitioned and murmured in vain; the monarch fled from their expostulations to scenes of mirth and festivity; and the act of indemnity was generally said to have been an act of *forgiveness* to the king's enemies, and of *oblivion* to his friends.

In 1661, the Scots and English parliaments seemed to vie with each other in their prostrations to the king. In England, monarchy and episcopacy were raised to the greatest splendor. The bishops were permitted to resume their seats in the house of peers; all military authority was acknowledged to be vested in the king. He was empowered to appoint commissioners for regulating corporations, and expelling such members as had intruded themselves by violence, or professed principles dangerous to the constitution. An act of uniformity was passed, by which it was required that every

²⁰⁹ Submission of both parliaments.

Britain. very clergyman should be re-ordained, if he had not before received episcopal ordination; that he should declare his assent to every thing contained in the book of Common prayer, and should take the oath of canonical obedience. In consequence of this law, above 2000 of the presbyterian clergy resigned their cures at once. In Scotland the right of the king was asserted in the fullest and most positive terms to be hereditary, divine, and indefeasible. His power was extended to the lives and possessions of his subjects, and from his original grant was said to come all that they enjoyed. They voted him an additional revenue of 40,000l.; and all their former violences were treated with a degree of the utmost detestation.

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The nation
disgusted
with the
king's ex-
travagance.

This intoxication of loyalty, however, began soon to wear off. The king's profusion and extravagance in his pleasures, together with his indolence in administration, furnished opportunities of making very disadvantageous comparisons between him and Oliver Cromwell. These animosities were heightened by the ejected clergy, especially when they saw Dunkirk, which had been acquired during the usurper's vigorous administration, sold to the French for 40,000l. and that merely to supply the king's extravagance. From this time (August 17th 1662), Charles found himself perpetually opposed, and his parliaments granted supplies much more reluctantly than before.

211
Marriage
with the in-
fanta of
Portugal.

A few months before, the continual exigencies of the king had forced him to conclude a marriage with the Infanta of Portugal for the sake of her portion, which was 500,000l. in money, together with the fortresses of Tangier in Africa, and of Bombay in the East Indies. The chancellor Clarendon, the dukes of Ormond and Southampton, urged many reasons against this match, particularly the likelihood of her never having any children; but all their objections could not prevail, and therefore Clarendon set himself to promote it as far as lay in his power. Still, however, the king's necessities were greater than his supplies. He therefore resolved to sacrifice his minister the great Clarendon to the resentment of the parliament, to whom he was become obnoxious, in order to procure some more supplies for himself. In 1663, an extraordinary supply was demanded: the king sent for the commons, on the 12th of June, to Whitehall. He complained of their inattention; and by acquainting them of a conspiracy to seize the castle of Dublin, he hoped to furnish a reason for demanding a present supply. Four subsidies were immediately granted, and the clergy in convocation followed the example of the commons. On this occasion the earl of Bristol ventured to impeach the chancellor in the house of peers; but as he did not support his charge, the affair was dropped for the present.

212
War with
the Dutch.

With a view probably of having the money to be employed for that purpose in his hands, Charles was induced to declare war against the Dutch in 1664. In this war the English, under the command of Sir Robert Holmes, expelled the Dutch from Cape-Corse castle on the coast of Africa, and likewise seized on their settlements of Cape Verd and the isle of Goree. Sailing from thence to America, the admiral possessed himself of Nova Belgia, since called *New York*; and which has ever since continued subject to Britain. On the other hand, De Ruyter, the Dutch admiral, dispossessed

the English of all their settlements in Guinea except Cape Corse. He afterwards sailed to America, where he attacked Barbadoes and Long Island, but was repulsed. Soon after, the two most considerable fleets of each nation met; the one under the duke of York, to the number of 114 sail; the other commanded by Opdam admiral of the Dutch navy, of nearly equal force. The engagement began at four in the morning, and both sides fought with equal intrepidity. The duke of York was in the hottest part of the engagement, and behaved with great spirit and composure, while many of his lords and attendants were killed beside him. In the heat of the action the Dutch admiral's ship blew up; which so discouraged and disheartened them, that they fled towards their own coast, having 30 ships sunk and taken, while the victors lost only one. This success of the English so much excited the jealousy of the neighbouring states, that France and Denmark immediately resolved to protect the republic from such formidable enemies. De Ruyter the great Dutch admiral, on his return from Guinea, was appointed, at the head of 76 sail, to join the duke of Beaufort the French admiral, who it was supposed was then entering the British channel from Toulon. The duke of Albemarle and prince Rupert now commanded the British fleet, which did not exceed 74 sail. Albemarle detached prince Rupert with 20 ships to oppose the duke of Beaufort; against which piece of rashness Sir George Ayscue protested in vain. The fleets thus engaging upon unequal terms, a most memorable battle ensued. The first day, the Dutch admiral Evertzen was killed by a cannon-ball, one of their ships was blown up, and three of the English ships taken; the combatants were parted by darkness. The second day they renewed the battle with incredible fury. Sixteen fresh ships joined the Dutch; and the English were so shattered, that their fighting ships were reduced to 28. Upon retreating towards their own coast, the Dutch followed them; where another dreadful conflict was beginning, but parted by the darkness of the night as before. The morning of the third day the English continued their retreat, and the Dutch their pursuit. Albemarle came to the desperate resolution of blowing up his own ship rather than submit to the enemy, when he found himself happily reinforced by prince Rupert with 16 ships of the line. By this time it was night; and the next day the fleets came again to a close combat, which was continued with great violence, till they were parted by a mist. Sir George Ayscue having the misfortune to strike on the Galoper sands, was taken, with a ship of 100 guns.

Both sides claimed the victory, but the Dutch certainly had the advantage in this engagement. A second, however, equally bloody, happened soon after, with larger fleets on both sides, commanded by the same admirals. In this the Dutch were vanquished; but they were soon in a condition to face their enemies, by the junction of Beaufort the French admiral. The Dutch fleet appeared in the Thames, conducted by their great admiral. The English were thrown into the utmost consternation: a chain had been drawn across the river Medway; and some fortifications had been added to the forts along the bank. But all these were unequal to the present force: Sheerness was soon taken; the Dutch passed forward and broke the chain, though

Britain.

213
Terrible
battles at
sea.

214
The Dutch fleet
appears in
the Thames.

Britain. fortified by some ships sunk by Albemarle's orders, Destroying the shipping in their passage, they still advanced, with six men of war and five fire-ships, as far as Upnore castle, where they burned three men of war. The whole city of London was in consternation; it was expected that the Dutch might sail up next tide to London-bridge, and destroy not only the shipping, but even the buildings of the metropolis. The Dutch, however, were unable to prosecute that project from the failure of the French who had promised them assistance. Spreading therefore an alarm along the coast, and having insulted Norwich, they returned to their own coasts.

215
Plague and
fire at Lon-
don.

During these transactions abroad, happened a great plague at London, which destroyed 100,000 of the inhabitants. This calamity was soon followed by another, still more dreadful if possible. A fire broke out in a baker's house in Pudding-lane near the bridge, and spread with such rapidity, that no efforts could extinguish it, till it laid in ashes the most considerable part of the city. This calamity, though it reduced thousands to beggary, proved in the end both beneficial and ornamental to the city. It rose from its ruins in greater beauty than ever; the streets being widened, and the houses built of brick instead of wood, became thus more wholesome and secure. In so great a calamity it is remarkable that not a single life was lost.

216
Peace with
Holland
concluded.

217
Clarendon
disgraced.

218
Alliance
with Hol-
land and
Sweden.

These complicated misfortunes did not fail to excite many murmurs among the people: The blame of the fire was laid on the Papists: the Dutch war was exclaimed against as unsuccessful and unnecessary, as being an attempt to humble that nation who were equal enemies to Popery with themselves. Charles himself also began to be sensible, that all the ends for which he had undertaken the Dutch war were likely to be entirely frustrated. Instead of being able to lay up money for himself, the supplies of parliament had hitherto been so scanty, that he found himself considerably in debt. A treaty therefore was set on foot, which was concluded at Breda on the 21st of July 1667. By this treaty the only advantage gained by Britain was, the cessation of the colony of New York. It was therefore judged disgraceful, and the blame of it thrown upon the unhappy earl of Clarendon. Along with this, he was charged with the sale of Dunkirk; the bad payment of the sea-men; the disgrace by the Dutch fleet; and his own ambition. His daughter, while yet in Paris, had commenced an amour with the duke of York; and under a solemn promise of marriage had admitted him to her bed. Her lover, however, either of his own accord, or through the persuasions of his brother Charles, afterwards married her; and this too was imputed as a crime to Clarendon. On these accusations, the king, who on account of his rigid virtue had never much loved this nobleman, ordered the seals to be taken from him, and given to Sir Orlando Bridgemen. Clarendon was again impeached; and though the charges were manifestly frivolous, yet so strong was the popular torrent against him, that he thought proper to withdraw into France. Soon after, the king formed an alliance with Holland and Sweden, in order to prevent the French king from completing his conquest of the Netherlands. The greatest part of this country he had already subdued, when he was unexpectedly stopped by this league; in which it was agreed by the contracting

powers, that they would constitute themselves arbiters of the differences between France and Spain, and check the exorbitant pretensions of either.

The king now began to act in a very arbitrary manner. He had long wished to extend his prerogative, and to be able to furnish himself with whatever sums he might want for his pleasures, and therefore was most likely to be pleased with those ministers who could flatter both his wishes at once. These he found in Clifford, Ashley, Buckingham, Arlington, and Lauderdale, a junto distinguished by the name of the *cabal*; a word formed by the initials of their names. The first effects of their advice was a secret alliance with France, and a rupture with Holland. Soon after this, the duke of York declared himself a Papist; and liberty of conscience was proclaimed to all sectaries, whether dissenters or Papists: a proclamation was issued containing very rigorous clauses in favour of pressing; another full of menaces against those who should speak undutifully of his majesty's measures; and even against those who heard such discourses, unless they informed in due time against the offenders. All these things gave very great and just offence to the people; but they were especially alarmed at the alliance with France, and justly afraid of the treachery of that nation.

On the 28th of May 1672, the English fleet under the duke of York was surprized by the Dutch in Southwold bay. About eight in the morning began a most furious engagement. The gallant Sandwich, who commanded the English van, drove his ship into the midst of the enemy, beat off the admiral that ventured to attack him, sunk another ship that attempted to board him and three fire-ships that offered to grapple with him. Though his vessel was torn with shot, and out of 1000 men there only remained 400, he still continued to fight. At last, a fire-ship, more fortunate than the rest, having laid hold of his vessel, her destruction became inevitable, and the earl himself was drowned in attempting to swim to some other ship. Night parted the combatants; the Dutch retired, and were not followed by the English. The loss sustained by the two maritime powers was nearly equal; but the French suffered very little, not having entered into the heat of the engagement. It was even supposed that they had orders for this conduct, and to spare their own ships, while the Dutch and English should weaken each other by their mutual animosities.

The combined powers were much more successful against the Dutch by land. Louis conquered all before him, crossed the Rhine, took all the frontier towns of the enemy, and threatened the new republic with a final dissolution. Terms were proposed to them by the two conquerors. Louis offered them such as would have deprived them of all power of resisting an invasion from France by land. Those of Charles exposed them equally to every invasion by sea. At last the murmurs of the English at seeing this brave and industrious people, the supporters of the Protestant cause, totally sunk and on the brink of destruction, were too loud not to reach the king. He was obliged to call the parliament, to take the sense of the nation upon his conduct; and he soon saw how his subjects stood affected.

The parliament met on the 4th of February 1673. They began with repressing some of the king's extraordinary stretches of prerogative, and taking means for uniformity

219
Arbitrary
proceedings
of Charles.

220
New war
with Hol-
land.

221
A desperate
naval en-
gagement.

222
Success of
Louis XIV.
against the
Dutch.

223
The parlia-
ment called.

Britain.
224
Test act
framed.

uniformity in religious matters. A law was passed entitled the *test act*, imposing an oath on all who should enjoy any public benefice. Besides the taking the oaths of allegiance and the king's supremacy, they were obliged to receive the sacrament once a-year in the established church, and to abjure all belief in the doctrine of transubstantiation. As the dissenters also had seconded the efforts of the commons against the king's declaration of indulgence to Roman Catholics, a bill was passed for their ease and relief, which, however, went with some difficulty through the house of peers. The Dutch in the mean time continued to defend themselves with such valour, that the commons began to despair of success. They therefore resolved that the standing army was a grievance: they next declared, that they would grant no more supplies to carry on the Dutch war, unless it appeared that the enemy were so obstinate as to refuse all reasonable conditions. To cut short these disagreeable altercations, the king resolved to prorogue the parliament; and with that intention, went unexpectedly to the house of peers, from whence he sent the usher of the black-rod to summon the house of commons to attend. It happened that the usher and the speaker met nearly at the door of the house; but the speaker being within, some of the members suddenly shut the door, and cried, "To the chair." Upon which the following motions were instantly made in a tumultuous manner: That the alliance with France was a grievance; that the evil counsellors of the king were a grievance; that the earl of Lauderdale was a grievance: and then the house rose in great confusion. The king soon saw that he could expect no supply from the commons for carrying on the war which was so disagreeable to them; he resolved, therefore, to make a separate peace with the Dutch, on terms which they had proposed by the Spanish ambassador. For form's sake, he asked the advice of his parliament: who concurring heartily in his intentions, a peace was concluded accordingly.

226
National
discontents.

The prepossession which Charles had all along shown for France, and his manifest inclination upon all occasions to attach himself to that kingdom, had given great offence to his people. Along with this, other circumstances conspired to raise a general discontent. The toleration of Catholics, so much wished for by the king; the bigotry of the duke of York, the heir apparent to the crown, and his zeal for the propagation of the Catholic religion; excited a consternation not altogether without foundation, as if the Protestant religion was in danger. This fear and discontent was carefully kept up and fomented by wicked and designing men, who to promote their own interests would not scruple to advance the grossest falsehoods. In 1678, an account of a plot formed by the Papists for destroying the king and the Protestant religion, was given in by one Kirby a chemist, Dr Tong, a weak credulous clergyman, and Titus Oates, who had likewise been a clergyman, but one of the most abandoned miscreants that can be imagined. The circumstances attending this pretended discovery were so perfectly incredible, that it appears amazing how any person of common sense could give ear to them. Nevertheless, so much were the minds of the nation in general inflamed against the Catholics at this time, that it not only produced the destruction of individuals of the Romish persuasion, but an universal massacre of that unhappy sect was apprehended. The

† See Oates.

parliament, who ought to have repressed these delusions, and brought back the people to calm deliberate inquiry, were found more credulous than even the vulgar themselves. The cry of plot was immediately echoed from one house to the other; the country party could not slip so favourable an opportunity of managing the passions of the people; the courtiers were afraid of being thought disloyal if they should doubt the guilt of those who were accused of designs against the king's person. Danby, the prime minister, himself entered into it very furiously, and persisted in his inquiries notwithstanding all the king's advices to the contrary. Charles himself, who was the person that ought to have been most concerned, was the only one who treated it with contempt. Nothing, however, could stop the popular fury; and for a time the king was obliged to give way to it.

During the time of this general uproar and persecution, the lord treasurer Danby was impeached in the house of commons by Seymour the speaker. The principal charge against him was, his having written a letter to Montague the king's ambassador at Paris, directing him to sell the king's good offices at the treaty of Nimeguen, to the king of France, for a certain sum of money; contrary to the general interests of the confederates, and even of those of his own kingdoms. Tho' the charge was just, yet Danby had the happiness to find the king resolved to defend him. Charles assured the parliament, that, as he had acted in every thing by his orders, he held him entirely blameless; and though he would deprive him of all his employments, yet he would positively insist on his personal safety. The lords were obliged to submit; however, they went on to impeach him, and Danby was sent to the Tower, but no worse consequences followed.

These furious proceedings had been carried on by an house of commons that had continued undissolved for above 17 years. They were now dissolved, and another parliament was called; which, however, proved as unmanageable as the preceding. The members resolved to check the growth of Popery by striking at the root of the evil; and therefore brought in a bill for the total exclusion of the duke of York from the crown of England and Ireland, which passed the lower house by a majority of 79. They next voted the king's standing army and guards to be illegal. They proceeded to establish limits to the king's power of imprisoning to delinquents at will. It was now also that the celebrated statute called the *habeas corpus act* was passed, which confirms the subject in an absolute security from oppressive power.

During these troubles, the duke of York had retired to Brussels; but an indisposition of the king led him back to England, to be ready in case of any sinister accident, to assert his right to the throne. After prevailing upon his brother to disgrace his natural son the duke of Monmouth, who was now become very popular, he himself retired to Scotland, under pretence of quieting the apprehensions of the English nation, but in reality to strengthen his interests in that part of the empire. This secession served still more to inflame the country party, who were strongly attached to the duke of Monmouth, and were resolved to support him against the duke of York. Mobs, petitions, pope-burnings, were artifices employed to keep up the terrors of Popery, and alarm the court. The parliament had shown favour to the various tribes of informers, and that served to increase

Britain.

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Lord Dan-
by impeach-
ed.

228

Exclusion
bill brought

^{Britain.} crease the number of these miscreants; but plots themselves also became more numerous. Plot was set up against plot; and the people were kept suspended in the most dreadful apprehension.

But it was not by plots alone that the adverse parties endeavoured to supplant each other. Tumultuous petitions on the one hand, and flattering addresses on the other, were sent up from all quarters. Wherever the country party prevailed, petitions were sent to the king filled with grievances and apprehensions. Wherever the church or court party prevailed, addresses were framed, containing expressions of the highest regard to his majesty, and the deepest abhorrence of those who endeavoured to disturb the public tranquillity. Thus the nation came to be distinguished into *petitioners* and *abhorers*. *Whig* and *Tory*, also, were now first used as terms of reproach. The whigs were so denominated from a cant name given to the four presbyterian conventicles, (*whig* being *milk turned sour*.) The tories were denominated from the Irish banditti so called, whose usual manner of bidding people deliver was by the Irish word *Toree*, or "Give me."

²²⁹
Petitioners
and abhor-
ers, who.

²³⁰
Attempt to
establish e-
piscopacy in
Scotland.

²³¹
Occasions
discontent.

²³²
Presbyteri-
ans persecu-
ted.

All this time the king had tyrannized over the Scots in a very cruel manner. Being apprized of the tendency of presbyterian principles to a republican form of government, Charles, like his predecessors, had endeavoured to introduce episcopacy there, but in a much more violent manner than had been formerly attempted. The rights of patrons had for some years been abolished; and the power of electing ministers had been vested in the kirk-session and lay elders: but it was now enacted, that all incumbents who had been admitted upon this title should receive a presentation, and be instituted anew by the bishop, under the penalty of deprivation. In consequence of this, 350 parishes were at once declared vacant. New ministers were sought for all over the kingdom, and none was so vicious or ignorant as to be rejected. The people, as might have been expected, were displeased to the highest degree; they resolved, however, to give no sign of mutiny or sedition, notwithstanding their discontent. This submission made their case still worse; it being foolishly imagined, that, as they did not complain for a little ill usage, they would submit altogether if they were worse treated.

Affairs remained in a peaceable situation, till, in 1661, a very severe act was passed in England against conventicles, and this severity was imitated by the Scots parliament, who passed an act of the same kind. Military force was next let loose. Wherever the people had generally forsaken their churches, the guards were quartered throughout the country. They were commanded by Sir James Turner, a man of a very furious temper and dissolute life. He went about and received lifts from the clergy of those who absented themselves from the churches, or were supposed to frequent conventicles. Without any proof, or legal conviction, he demanded a fine from them; and quartered soldiers on the supposed criminals till he received payment. An insurrection being dreaded during the Dutch war, new forces were levied, and entrusted to the command of Dalziel and Drummond, two men of very cruel dispositions, and the Scots parliament gave full scope to all their enormities.

Representations were now made to the king, who

promised some redress. But his lenity came too late. The people, in 1668, rose in arms. They surprised Turner in Dumfries, and resolved to have put him to death; but finding his orders to be more violent than his execution of them, they spared his life. At Lanark they renewed the covenant, and published their manifesto; where they professed their submission to the king, and only desired the re-establishment of presbytery, and of their former ministers. Their force never exceeded 2000 men; and though the country in general bore them great favour, mens spirits were so subdued, that the insurgents could expect no farther increase of numbers. Dalziel took the field to oppose them. The number of the covenanters was now reduced to 800, and these no way capable of contending with regular forces. Having advanced near Edinburgh, they attempted to find their way back into the west by Pentland hills. Here they were attacked by the king's troops, and received the first charge very resolutely: but that was all the action. Immediately they fell into confusion, and fled. About 40 were killed on the spot, and 130 taken prisoners.

So long ago as the year 1661, the presbyterians had deputed one Sharpe, to lay their grievances before the king. Instead of this, their deputy abandoned the cause altogether, became their violent enemy, and as a reward of his treachery was made archbishop of St Andrews. After the battle of Pentland-hills, this man was the foremost to take vengeance on the unhappy insurgents, whose oppressed state and inoffensive behaviour had made them objects of universal compassion. Ten were hanged on one gibbet in Edinburgh; 35 before their own doors in different places. They might all have saved their lives, if they would have renounced the covenant; but this they absolutely refused. The executions were going on, when the king wrote a letter to the privy council, in which he ordered that such of the prisoners as should simply promise to obey the laws for the future should be set at liberty, and that the incorrigible should be sent to the plantations. This letter was brought to the council by Burnet, but was not immediately delivered by Sharpe. What his motives were for this delay, we pretend not to say; but certain it is, that no action of his life will bear a worse construction than this. It had been customary to put these poor creatures to very severe tortures, in order to make them confess that to be falsehood which they believed to be true. By Sharpe's delay, one Hugh Maccaill had been tortured, who would otherwise have escaped; and so violent were the torments he endured, that he expired under them. He seemed to die in an ecstasy of joy. His last words were uttered with an accent which struck all the bystanders with astonishment. "Farewell (said he) sun, moon, cail, aud stars; farewell world and time; farewell weak frail body; welcome eternity; welcome angels and saints; welcome Saviour of the world; and welcome God the judge of all."

In 1670, an act against conventicles was passed, seemingly with a design of mitigating the former persecuting laws; though even this was severe enough. By this act, the hearer in a conventicle (that is, in a dissenting assembly where more than five beside the family were present) was fined 5 s. for the first offence, and 10 s. for the second; the preacher L. 20 for the first offence,

^{Britain.}
²³³
An insur-
rection.

²³⁴
Insurgents
defeated at
Pentland-
hills.

²³⁵
Cruelty of
archbishop
Sharpe.

²³⁶
Last words
of Mr Mac-
caill.

²³⁷
Act against
conventi-
cles.

Britain.

offence, and L. 40 for the second. The person in whose house the conventicle met was fined a like sum with the preacher. One remarkable clause was, that if any dispute should arise with regard to the interpretation of any part of the act, the judges should always explain the doubt in the sense least favourable to conventicles, it being the intention of parliament entirely to suppress them.

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Schemes of
comprehension
and indulgence.

As the violent methods used by the king were found ineffectual to obtain his purpose in Scotland, in 1678 a scheme of comprehension was tried, by which it was proposed to diminish greatly the authority of the bishops, to abolish their negative voice in the ecclesiastical courts, and to leave them little more than the right of precedence among the presbyters: but this too was rejected by the people, who well knew its tendency. The next scheme was an indulgence. By this, the most popular of the expelled preachers, without requiring any terms of submission to the established religion, were settled in vacant churches; and small salaries of about L. 20 a-year were offered to the rest, till they should be otherwise established. This bounty was rejected as the wages of criminal silence, and the replaced ministers soon repented of their compliance; conventicles multiplied, and the covenanters daily met in arms at their places of worship, though they usually dispersed themselves after divine service.

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Persecution
renewed.

These mild methods being rejected, a renewal of the persecution commenced under the administration of the duke of Lauderdale, and in which archbishop Sharpe had a principal hand. It was an old law, and but seldom put in execution, that a man who was accused of any crime, and did not appear to take his trial, might be *intercommuned*; that is, he might be publicly outlawed; and whoever afterwards, either on account of business, relation, or charity, had the least intercourse with him, was subjected to the same penalties which the law could inflict on the criminal himself. A great many writs of intercommuning were now issued against the covenanters; by which absurd method of proceeding, crimes and punishments were multiplied to an extreme degree.

Application was made to Charles for some redress of these grievances: but he was too much taken up with his pleasures to take any effectual means of putting a stop to them; nay, even while he retracted them, he was persuaded to avow and praise them in a letter to the privy council. The consequence of all this was, that the covenanters were at last so much enraged against Sharpe, whom they considered as an apostate, and experienced to be an unrelenting persecutor, that, on the 3d of May 1679, he was way-laid and murdered with all the circumstances of unrelenting cruelty. The murder of Sharpe produced a persecution still more violent, which at last brought on another insurrection.

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Archbishop
Sharpe
murdered.241
Second in-
surrection.

The covenanters finding themselves obliged to meet in large bodies, and bring arms along with them for their own security, set forth a declaration against prelacy, which they published at Rutherglen, a small borough near Glasgow; and in the market-place there they burned several acts of parliament which had established that mode of ecclesiastical government, and had prohibited all conventicles. For this purpose they chose the 29th of May, the anniversary of the restoration;

and previously extinguished the bonfires that had been kindled on that occasion. Count Graham, afterwards viscount Dundee, an active and enterprising officer, attacked a great conventicle upon Loudon-hill, but was repulsed with the loss of 30 men. The covenanters then finding themselves unwarily engaged in rebellion, were obliged to persevere; and therefore pushed on to Glasgow, which, though repulsed at first, they afterwards made themselves masters of. Here they dispossessed the established clergy, and issued proclamations, in which they declared that they fought against the king's supremacy, against Popery and Prelacy, and against a Popish successor.

Charles, being now alarmed, dispatched against the covenanters a small body of English cavalry under the duke of Monmouth. He joined the Scots guards, and some regiments of militia levied from the well affected counties; and with great celerity marched in quest of the insurgents. They had taken post at Bothwell-bridge between Hamilton and Glasgow; where there was no access but by the bridge, and where a small body was able to defend it against the king's army. The whole army of the covenanters never exceeded 8000 men, and they had in reality no other generals than their clergymen. Monmouth attacked the bridge, and the covenanters maintained their post as long as their ammunition lasted. When they sent for more, they received orders to quit their post and retire; and this imprudent measure occasioned an immediate defeat. Monmouth passed the bridge without opposition, and drew up his forces opposite to the enemy. His cannon alone put them to the rout. About 700 were killed in the pursuit; for, properly speaking, there was no action. Twelve hundred were taken prisoners, and treated with humanity by Monmouth. Such as promised to live peaceably under the present government were dismissed; and about 300 who refused this condition were shipped for Barbadoes, but unfortunately perished by the way. Two of their clergymen were hanged. Soon after, an act of indemnity was passed: but Lauderdale took care that it should afford little protection to the unhappy covenanters; for though orders were given to connive thenceforward at all conventicles, he found means under a variety of pretences to elude the execution of them.

It is now certainly known, that king Charles II. had formed a scheme of overturning the established religion, and substituting Popery in its place; as also of rendering himself absolute. In this, however, he met with violent opposition from his parliaments; and as this one of 1679 seemed even to surpass their predecessors in violence, the king was induced to dissolve them and call another in 1680. By this step, however, he was no gainer. They voted the legality of petitioning the king; and fell with extreme violence on the abhorers, who in their addresses to the crown had expressed their disapprobation of those petitions. Great numbers of these were seized by their order in all parts of England, and committed to close custody: the liberty of the subject, which had been so carefully guarded by their own recent law, was every day violated by their arbitrary and capricious imprisonments. One Stowel of Exeter put a stop to their proceedings: he refused to obey the serjeant at arms who was sent to apprehend him; he stood upon his defence, and said he knew no

law

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Insurgents
defeated at
Bothwell-
bridge.243
Violent
proceedings
of parlia-
ment.

Britain.

law by which the house of commons pretended to commit him. The house, finding it equally dangerous to proceed or recede, got off by an evasion. They voted that Stowel was indisposed: and a month's time was allowed him for his recovery. It is happy for the nation, that should the commons at any time overleap the bounds of their authority, and capriciously order men to be put in prison, there is no power, in case of resistance, that can compel the prisoners to submit to their decrees.

The chief point, however, laboured by the present parliament was, to obtain the exclusion bill, which, though the former house had voted, was never yet passed into a law. It passed by a great majority in the house of commons, but was thrown out by the house of peers. All the bishops except three voted against it; for they were of opinion that the church of England was in much greater danger from the prevalence of presbyterianism than Popery. The commons were extremely mortified at the rejection of their favourite bill: in revenge, they passed several other disagreeable acts, among which one was, That, till the exclusion bill was passed, they could not, consistent with the trust reposed in them, grant the king any manner of supply; and that whoever should hereafter lend, by way of advance, any money upon the branches of the king's revenue, should be responsible to parliament for his conduct. Charles, therefore, finding that there were no hopes of extorting either money or obedience from the commons, came to a resolution of once more dissolving the parliament. His usher of the black-rod accordingly came to dissolve them while they were voting that the dissenters should be encouraged, and that the Papists had burned the city of London.

244
Parliament
dissolved.

245
New one
called at
Oxford.

It was for some time a doubt whether the king would ever call another parliament: his necessities, however, surmounted all his fears of their violence; and, in 1681, he summoned his parliament to meet him at Oxford, that he might thus have an opportunity of punishing the city of London by showing his suspicions of their loyalty. In this, as in all former parliaments, the country party predominated; and they trode exactly in the same paths with their predecessors. The same speaker was chosen, and the exclusion bill urged more fiercely than before. Ernely, one of the king's ministers, proposed that the duke should be banished 500 miles from England; and that on the king's decease the next heir should be constituted regent with regal power. Yet even this expedient, which left the duke the bare title of king, could not obtain the attention of the house. Nothing but a total exclusion could satisfy them.

246
Case of
Fitzharris.

Each party had now for some time reviled and ridiculed each other in pamphlets and libels; and this practice at last was attended with an incident that deserves notice. One Fitzharris, an Irish Papist, employed a Scotsman named *Everhard* to write a libel against the king and the duke of York. The Scot was actually a spy for the contrary party; and supposing this a trick to entrap him, he discovered the whole to Sir William Waller, an eminent justice of the peace; and, to convince him of the truth of his information, posted the magistrate and two other persons privately, where they heard the whole conference between Fitzharris and himself. The libel composed between them was replete with the utmost rancour and scurrility. Waller carried

the intelligence to the king, and obtained a warrant for committing Fitzharris, who happened at that very time to have a copy of the libel in his pocket. Seeing himself in the hands of a party from whom he expected no mercy, he resolved to side with them, and throw the odium of the libel upon the court, who, he said, were willing to draw up a libel which should be imputed to the exclusioners, and thus render them hateful to the people. He enhanced his services to the country-party by a new Popish plot more tremendous than any of the foregoing, and in which he brought in the duke of York as a principal accomplice.

The king imprisoned Fitzharris; the commons avowed his cause. They voted that he should be impeached by themselves, to screen him from the ordinary forms of justice: the lords rejected the impeachment; the commons asserted their right: a commotion was likely to ensue; and the king, to break off the contest, went to the house and dissolved the parliament, with a fixed resolution never to call another.

247
Parliament
dissolved.

From this moment the king ruled with despotic power. His temper, which had always been easy and merciful, now became arbitrary and cruel; he entertained spies and informers round the throne, and imprisoned all such as he thought most daring in their designs. He resolved to humble the presbyterians: they were divested of their employments and their places; and their offices given to such as held with the court, and approved the doctrine of non-resistance. The clergy began to testify their zeal and their principles by their writings and sermons; but though among these the partizans of the king were the most numerous, those of the opposite faction were the most enterprising. The king openly espoused the cause of the former; and thus placing himself at the head of a faction, he deprived the city of London, which had long headed the popular party, of their charter. It was not till after an abject submission that he restored it to them, having previously subjected the election of their magistrates to his immediate authority.

248
Arbitrary
proceedings
of the king.

249
London de-
prived of its
charter.

Terrors also were not wanting to confirm this new species of monarchy. Fitzharris was brought to a trial before a jury, and condemned and executed. The whole gang of spies, witnesses, informers, suborners, which had long been encouraged and supported by the leading patriots, finding now that the king was entirely master, turned short upon their ancient drivers, and offered their evidence against those who first put them in motion. The king's ministers gave them encouragement; and in a short time the same injustice and the same cruelties were practised against presbyterian schemes that had formerly been practised against Catholic treasons. The king's chief resentment was levelled against the earl of Shaftesbury; and, indeed, not without reason, as he had had a very active hand in the late disturbances. No sums were spared to seek for evidence, or even to suborn witnesses, against this intriguing and formidable man. A bill of indictment being presented to the grand jury, witnesses were examined, who swore to such incredible circumstances as must have invalidated their testimony, even if they had not been branded as perjured villains. Among his papers, indeed, a draught of an association was found, which might have been construed into treason; but it was not in the earl's hand-writing, nor could it be proved

Belain.

proved that he had ever communicated this scheme to any body, or signified his approbation of any such project. The sheriffs had summoned a jury, whose principles coincided with those of the earl; and that probably, more than any want of proof, procured his safety.

In 1683, the city of London was deprived of its charter; which was restored only upon terms of the utmost submission, and giving up the nomination of their own magistrates. This was so mortifying a circumstance, that all the other corporations in England soon began to fear the same treatment, and were successively induced to surrender their charters into the hands of the king. Considerable sums were exacted for restoring these charters; and all the offices of power and profit were left at the disposal of the crown. Resistance now, however justifiable, could not be safe; and all prudent men saw no other expedient but submitting patiently to the present grievances.

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Other cor-
porations
resign
theirs.

251
Conspiracy
against the
king.

There was a party, however, in England, that still cherished their former ideas of freedom, and resolved to restore liberty to their country by dethroning the king who acted in such a despotic manner. The principal conspirators were Monmouth, Shaftesbury, Russel, Essex, Howard, Algernon, Sidney, and John Hamden grandson to the great man of that name. Monmouth engaged the earl of Macclesfield, Lord Brandon, Sir Gilbert Gerard, and other gentlemen in Cheshire. Lord Russel fixed a correspondence with Sir William Courtney, Sir Francis Knowles, and Sir Francis Drake, who promised to raise the west. Shaftesbury, with one Ferguson, an independent clergyman, and a restless plotter, managed the city, upon which the confederates chiefly relied. These schemes had been laid in 1681: but the caution of Lord Russel, who induced the duke of Monmouth to put off the enterprise, saved the kingdom from the horrors of a civil war; while Shaftesbury was so struck with a sense of his impending danger, that he left his house, and lurking about the city, attempted, but in vain, to drive the Londoners to an open insurrection. At last, enraged at the numberless cautions and delays which clogged and defeated his projects, he threatened to begin with his own friends singly. However, after a long struggle between fear and rage, he abandoned all hopes of success, and fled to Amsterdam, where he soon after died.

The loss of Shaftesbury, though it retarded, did not suppress, the designs of the conspirators. The remaining six formed a council; they corresponded with Argyle and the malecontents in Scotland; and resolved to prosecute the scheme of the insurrection, tho' they widely differed in principles from one another. Monmouth aspired at the crown; Russel and Hamden proposed to exclude the duke of York from the succession, and redress the grievances of the nation; Sidney was for restoring the republic, and Essex joined in the same wish. Lord Howard was an abandoned man, who, having no principles, sought to embroil the nation, to gratify his private interest in the confusion.

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Design of
assassinating
him form-
ed.

Besides these, there was a set of subordinate conspirators, who frequently met together, and carried on projects quite unknown to Monmouth and his council. Among these was colonel Rumsey, an old republican officer; lieutenant-colonel Walcot, of the same stamp; Goodenough, under sheriff of London, a zealous

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and noted party-man; Ferguson, an independent minister; and several attorneys, merchants, and tradesmen of London. But Rumsey and Ferguson were the only persons that had access to the great leaders of the conspiracy. These men undertook the desperate resolution of assassinating the king in his way to New-market; Rumbold, one of the party, possessed a farm upon that road, called the *Rye-house*, and from thence the conspiracy was called the *Rye-house plot*. They deliberated on a scheme of stopping the king's coach by overturning a cart on the high way at this place, and shooting him through the hedges. The house in which the king lived at New-market accidentally took fire, and he was obliged to leave New-market eight days sooner than was expected; to which circumstance he owed his safety. Soon after this the conspiracy was discovered; Russel, Sidney, and Walcot, were executed; Essex cut his own throat; Hamden was fined 40,000*l.*; and scarce one escaped who had been in any manner concerned, except the duke of Monmouth, who was the most culpable of all.

This was the last blood that was shed on account of plots or conspiracies, which continued during the greatest part of this reign. Severe punishments, however, were inflicted on many who treated the duke of York unworthily. The famous Titus Oates was fined 100,000*l.* for calling him a Popish traitor; and he was imprisoned till he should pay it, which he was absolutely incapable of. A similar sentence was passed upon Dutton Colt. Sir Samuel Barnadiston was fined 10,000*l.* for having in some private letters reflected on the government. The government of Charles was now as absolute as that of any prince in Europe; but to please his subjects by an act of popularity, he judged it proper to marry the lady Anne, his niece, to prince George brother to the king of Denmark. This was the last remarkable transaction of this extraordinary reign. On February 2d, 1685, about eight in the morning, the king was seized with a fit of the apoplexy; being dressed, and just come out of his closet, where he had been for some time after he rose from bed. By being blooded, he was restored perfectly to his senses; and there were great hopes of his recovery the next day. On the fourth day the physicians despaired of his life, and therefore sent for the queen. He was in his perfect senses when she arrived. She threw herself on her knees, and asked his pardon for all her offences. He replied, that she had offended in nothing; but that he had been guilty of offences against her, and asked her pardon. He spoke with great affection to the duke of York, and gave him excellent counsel for his future conduct. He advised him to adhere to the laws with strictness, and invariably to support the church of England. The duke seemed anxious to convince him before he died how little he intended to follow his advice. Having removed the bishops, and several of the lords who attended the bed of the king, he sent for Huddleston, a Romish priest. In the presence of the duke, the earl of Bath, and Trevannion a captain in the guards, Huddleston gave the extreme unction to the king, and administered to him the sacrament according to the rites of the church of Rome. All this was done in the space of half an hour. The doors were then thrown open. Six prelates, who had before attended the king, were sent for to give him the

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It miscar-
ries.

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Death of
Charles II.

4 H

sacrament.

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sacrament. Kenn, bishop of Bath and Wells, read the visitation of the sick; and after he said that he repented of his sins, the absolution. The king assisted with seeming devotion at the service; but his mouth being distorted with fits, and his throat contracted, he could not swallow the elements. He professed, however, his satisfaction in the church of England; and expired on the 6th of February, between 11 and 12 o'clock; having reigned 25 years, and lived 55.

The first act of James II.'s reign was to assemble the privy council: where, after some praises bestowed on the memory of his predecessor, he made professions of his resolution to maintain the established government both in church and state; and as he had heretofore ventured his life in defence of the nation, he would still go as far as any man in maintaining all its just rights and privileges.

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Servile ad-
dresses to
James II.

256
Quakers
addresses.

257
Imprudent
behaviour
of the new
king.

This discourse was received with great applause, not only by the council, but by the whole nation. Addresses came from all quarters, full of duty, nay of the most servile adulation. From this charge, however, we must except those of the quakers, which is remarkable for its good sense and simplicity. "We are come (said they) to testify our sorrow for the death of our good friend Charles, and our joy for thy being made our governor. We are told that thou art not of the persuasion of the church of England no more than we: wherefore we hope that thou wilt grant us the same liberty which thou allowest thyself. Which doing, we wish thee all manner of happiness."

The king, however, soon showed, that he either was not sincere in his promises, or that he entertained so lofty an idea of his own legal power, that even his utmost sincerity could tend very little to the security of the liberties of the people. All the customs, and the greater part of the excise, which had been voted to the late king for his life only, were levied by James without a new act for that purpose. He went openly to mass with all the ensigns of his dignity; and even sent one Caryl as his agent to Rome to make submissions to the Pope, and to pave the way for the readmission of England, into the bosom of the Catholic church. From the suggestions of these men all his measures were undertaken. One day when the Spanish ambassador ventured to advise his majesty against putting too much confidence in such kind of people, "Is it not the custom in Spain (said James) for the king to consult with his confessor?" "Yes (answered the ambassador), and that is the reason why our affairs succeed so very ill."

James's first parliament, which was composed mostly of zealous tories, was strongly inclined to comply with the measures of the crown. They voted unanimously, that they should settle on the present king, during life, all the revenue enjoyed by the late king till the time of his decease. For this favour, James assured them, that he would secure them in the full enjoyment of their laws; but with regard to religion, no answer could be

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In some re-
spect she be-
haves well.

extorted, for that he was resolved to alter. In every thing, however, religion excepted, James merited every praise. He applied himself to business with unremitting attention. He managed his revenue with the strictest economy. He retrenched superfluous expences, and showed himself zealous for the glory of the nation. He endeavoured to expel from court the vice which had prevailed so much during the former reign, and to restore

decency and morality. He presided daily at the council, at the boards of admiralty and treasury. He even entered into the whole detail of the concerns of the great departments of the state. But his bigotry for the Romish religion sullied all his good qualities, and rendered him feared for his violence, where he was not despised for his weakness.

But whilst every thing was submitted in tranquillity to James at home, a storm was gathering abroad to disturb his repose. For a long time the prince of Orange had entertained hopes of ascending the British throne, and had even used all his endeavours to exclude James from it. Monmouth, who, since his last conspiracy, had been pardoned, but ordered to depart the kingdom, had retired to Holland. He was received by the prince of Orange with the highest marks of distinction, and even became his chief favourite, through whom all favours were to be obtained. When the news of Charles's death arrived, indeed, the prince made a show of altering his note, and dismissed Monmouth, though he still kept a close correspondence with him. The duke retired to Brussels, where, under the auspices of the prince of Orange, he resolved to invade England, with a design of seizing the crown for himself. He was seconded by the duke of Argyle, who formed the scheme of an insurrection in Scotland; and while Monmouth attempted to make a rising in the west of England, it was resolved that Argyle should also try his endeavours in the north. The generosity of the prince of Orange, however, did not correspond with the warmth of his professions. The unfortunate duke derived from his own plate and jewels his whole supply for the war; and the enthusiasm of a rich widow supplied Argyle with 10,000 l. wherewith he purchased three vessels, which he loaded with arms and ammunition.

Argyle was the first who landed in Scotland, where he published his manifestoes, put himself at the head of 2500 men, and strove to influence the people in his favour. But a formidable body of the king's forces coming against him, his army fell away; and he himself, after being wounded in attempting to escape, was taken prisoner by a peasant who found him standing up to the neck in water. He was from thence carried to Edinburgh, where after suffering many indignities he was publicly executed.

By this time Monmouth had landed in Dorsetshire with scarce 100 followers. His name, however, was so popular, and so great was the hatred of the people to James on account of his religion, that in four days he had assembled a body of above 2000 men. They were indeed all of them the lowest of the people, and his declarations were suited entirely to their prejudices. He called the king the duke of York; and denominated him a traitor, a tyrant, a murderer, and a Popish usurper. He imputed to him the fire of London, and even affirmed that he had poisoned the late king.

Monmouth continued to make a rapid progress, and in a short time found himself at the head of 6000 men; but was daily obliged to dismiss great numbers for want of arms. The king was not a little alarmed at his invasion. Six regiments of British troops were called over from Holland; and a body of regulars, to the number of 3000, were sent, under the command of the earl of Feversham and Churchill, to check the progress.

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Mon-
mouth's
conspiracy.

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Defeat and
death of
Argyle.

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Monmouth
lands in
England.

Britain. gress of the rebels. They took post at Sedgemore, a village in the neighbourhood of Bridgewater, and were joined by considerable numbers of the country militia. Here Monmouth resolved, by a desperate effort, to lose his life or gain the kingdom. He drove the royal infantry from their ground, and was on the point of gaining a complete victory, when the cowardice of Gray, who commanded the horse, brought all to ruin. This nobleman fled at the first onset; and the rebels, being charged in flank, gave way after a three-hours contest. About 300 were killed in the engagement, and 1000 in the pursuit. Monmouth fled above 20 miles from the field of battle, till his horse sunk under him. He then alighted; and, exchanging clothes with a shepherd, fled on foot, attended by a German count who had accompanied him from Holland. Being quite exhausted with hunger and fatigue, they both lay down in a field, and covered themselves with fern. The shepherd being found in Monmouth's clothes by the pursuers, increased the diligence of the search; and by the means of blood-hounds he was detected in his miserable situation, with raw pease in his pocket, on which he had lived for some days. He burst into tears when seized by his enemies; and petitioned, with the most abject submissions, for his life. On his way to London, he wrote a submissive letter to the king, promising discoveries, should he be admitted into his presence. The curiosity of James being excited by the letter, he sent Sheldon a gentleman of the bed-chamber to meet Monmouth. In his conversation with Sheldon, he asked who was in chief confidence with the king? and being answered that it was Sunderland, Monmouth knocked his breast in a surprise, and said, "Why then, as I hope for salvation, he promised to meet me." He desired Sheldon to inform the king, that several of his accomplices in rebellion were in the confidence of his majesty; and he gave him a particular account of the part which the prince of Orange had acted in this whole affair.

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Defeated at
Sedgemore.

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Is taken in
a most mi-
serable situ-
ation.

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Attempts in
vain to ob-
tain mercy

Sheldon, on his return from the duke of Monmouth, began to give an account to the king of what he had learned from the unhappy prisoner. Sunderland, pretending business, came into the room. Sheldon stopped, and signified his desire to speak in private with the king. James told him he might say any thing before that lord. Sheldon was in great perplexity; but being urged, he told all that Monmouth had asserted. Sunderland appeared for some time confused: at length he said, with a laugh, "If that is all he can discover to save his life, he will derive little good from his information." Monmouth himself was soon after brought before the king. Sunderland by an artifice ensured the death of the unfortunate duke, to save himself and the other adherents of the prince of Orange. When he saw Monmouth's letter to James, and heard the discoveries made by Sheldon, he is said to have advised him, that, as he could assure him of the certainty of a pardon, he ought to deny what he had said in prejudice of his friends, who could serve him on some other more favourable occasion. The credulous duke, swayed by the advice of Sunderland, suppressed what he had said to Sheldon, when he was examined by the king. He mentioned nothing of the concern which the prince of Orange had taken in the invasion; though a point on which James was already sufficiently inform-

ed. D'Avaux, the French minister to the States, had given a circumstantial account of the whole conduct of the prince to Louis XIV. who had ordered it to be privately communicated to the king of England. The minister who had been sent from Holland to congratulate James on the suppression of Argyle's rebellion, was in a grievous agony when he heard that the king was resolved to see Monmouth. "Though he found that he said nothing of his master (said James), he was never quiet till Monmouth was dead."

The unfortunate duke made various attempts to obtain mercy. He wrote to the queen dowager; he sent a letter to the reigning queen, as well as to the king himself. He begged his life, when admitted into his presence, with a meanness unsuitable to his pretensions and high rank. But all his entreaties and submissions were of no avail. James told him, that he was much affected with his misfortunes, but that his crime was too dangerous in its example to be left unpunished. In his last moments he behaved with a magnanimity worthy of his former courage. When he came to the scaffold, he behaved with decency and even with dignity. He spoke little; he made no confession; nor did he accuse any of his friends. Circumstances are said to have attended his death that created a horror among the spectators. The executioner missed his blow, and struck him slightly on the shoulder. Monmouth raised his head from the block, and looked him full in the face, as if reproaching him for his mistake. He struck him twice again, but with feeble strokes; and then threw the axe from his hands. The sheriff forced him to renew his attempt; and the head of the duke, who seemed already dead, was at last severed from his body.

Those concerned in the duke of Monmouth's conspiracy were punished with the utmost severity. Immediately after the battle of Sedgemore, Feversham hanged up above 20 prisoners; and was proceeding in his executions, when the bishop of Bath and Wells informed him that these unhappy men were now by law intitled to a trial, and that their execution would be deemed a real murder. Nineteen were put to death in the same manner at Bridgewater by colonel Kirke, a man of a savage and bloody disposition. This vile fellow, practised in the arts of slaughter at Tangier, where he served in garrison, took pleasure in committing instances of wanton barbarity. He ravaged the whole country, without making any distinction between friend and foe. His own regiment, for their peculiar barbarity, went under the ironical title of *Kirke's lambs*. It doth not, however, appear, that these cruelties were committed by the direction, or even with the approbation, of James; any more than the legal slaughters that were committed by judge Jefferies, who was sent down to try the delinquents. The natural brutality of this man's temper was inflamed by continual intoxication. No fewer than 80 were executed by his orders at Dorchester; and on the whole, at Exeter, Taunton, and Wells, 250 are computed to have fallen by the hand of justice as it was called; nor were women exempted from the general severity, but suffered for harbouring their nearest kindred. Jefferies on his return was immediately created a peer, and soon after vested with the dignity of chancellor. In justice to the king, however, it must be owned, that in his Memoirs he complains, with apparent indignation, of "the

Britain.

265
Terribly
mangled by
the execu-
tioner.

266
Rebels cru-
elly treated.

²⁶⁷ Britain. strange havoc made by Jefferies and Kirke in the west; and that he attributed the unpopularity, which afterwards deprived him of the crown, to the violence and barbarity of those pretended friends of his authority. He even ascribes their severities, in some degree, to a formed design of rendering his government odious to his subjects; and from hence it is probable, that no exact or impartial accounts of these cruelties had reached his ears, at least till long after they were committed.

James endeavours to establish Popery.

²⁶⁸ Parliament dissolved.

²⁶⁹ Catholics promoted.

²⁷⁰ English clergy oppose the court measures.

James now began to throw off the mask, and to endeavour openly to establish Popery and arbitrary power. He told the house of commons, that the militia were found by experience to be of no use; that it was necessary to augment the standing army; and that he had employed a great many Catholic officers, in whose favour he had thought proper to dispense with the test required to be taken by all who were employed by the crown. He found them useful, he said, and he was determined to keep them employed. These stretches of power naturally led the lords and commons into some degree of opposition; but they soon acquiesced in the king's measures, and then the parliament was dissolved for their tardy compliance. This was happy for the nation; for it was perhaps impossible to pick out another house of commons that could be more ready to acquiesce in the measures of the crown; but the dissolution of this parliament was generally looked upon as a sign that James never intended to call another.

The parliament being dismissed, James's next step was to secure a Catholic interest in the privy council. Accordingly four Catholic lords were admitted, viz. Powis, Arundel, Belasis, and Dover. Sunderland, who saw that the only way to gain preferment was by Popery, became a convert. Rochester, the treasurer, was turned out of his office, because he refused to conform. Even in Ireland, where the duke of Ormond had long supported the royal cause, this nobleman was displaced as being a Protestant; and the lord Tyrconnel, a furious Roman-catholic, was placed in his stead. In his zeal for Popery, it is said, that James stooped so low as even to attempt the conversion of colonel Kirke: but the daring soldier told him, that he was pre-engaged; for he had promised the king of Morocco, when he was quartered at Tangiers, that, if ever he changed his religion, he would turn Mahometan.

At last the clergy of the church of England began to take the alarm, and commenced an opposition to court measures. The pulpits now thundered out against Popery; and it was urged, that it was more formidable from the support granted it by the king. It was in vain that James attempted to impose silence on these topics; instead of avoiding the controversy, the Protestant preachers pursued it with greater warmth.

To effect his designs, the king determined to revive the high commission court, which had formerly given the nation so much disgust, and which had been abolished for ever by act of parliament. An ecclesiastical commission was issued out anew, by which seven commissioners were invested with a full and unlimited authority over the whole church of England.—The next step was to allow a liberty of conscience to all sectaries; and he was taught to believe, that the truth of the Catholic

religion would then, upon a fair trial, gain the victory. In such a case, the same power that granted liberty of conscience might restrain it; and the Catholic religion alone be allowed to predominate. He therefore issued a declaration of general indulgence, and asserted that nonconformity to the established religion was no longer penal. In Scotland, he ordered his parliament to grant a toleration only to the Catholics, without interceding in the least for the other dissenters who were much more numerous. In Ireland, the Protestants were totally expelled from all offices of trust and profit, and Catholics put in their places. These measures sufficiently disgusted every part of the British empire; but to complete the work, James publicly sent the earl of Castlemaine ambassador extraordinary to Rome, in order to express his obedience to the Pope, and reconcile his kingdoms to the Catholic communion. This proceeding was too precipitate to be relished even by the Pope himself; and therefore the only return he made to this embassy was the sending a nuncio into England. The nuncio made a public and solemn entry into Windsor; which did not fail to add to the general discontent; and because the duke of Somerset refused to attend the ceremony, he was dismissed from his employment of one of the lords of the bed-chamber.

Soon after this, the Jesuits were permitted to erect colleges in different parts of the kingdom, and to exercise the Catholic worship in the most public manner. Father Francis, a benedictine monk, was recommended by the king to the university of Cambridge for the degree of master of arts. The university rejected him on account of his religion; and presented a petition to the king, beseeching him to recal his mandate. James disregarded their petition, and denied their deputies a hearing; the vice chancellor himself was summoned to appear before the high commission court, and deprived of his office; yet the university persisted, and father Francis was refused. The place of president of Magdalen college being vacant, the king sent a mandate in favour of one Farmer, a new convert, and a man of bad character in other respects. The fellows of the college made very submissive applications for recalling his mandate; but the election day coming on before they received an answer, they chose Dr Hough, a man of learning, integrity, and resolution. The king was incensed at their presumption; an inferior ecclesiastical court was sent down, who finding Farmer a man of scandalous character, issued a mandate for a new election. The man now recommended by the king was doctor Parker; a man of an abandoned character, but very willing to embrace the Catholic religion. The fellows refused to comply with this injunction; which so irritated the king, that he came down to Oxford in person, and ordered the fellows to be brought before him. He reproached them with their insolence and disobedience; and commanded them to choose Parker without delay. Another refusal on their side served still more to exasperate him; and finding them resolute in the defence of their privileges, he ejected them all except two from their benefices, and Parker was put in possession of the place. Upon this, the college was filled with Catholics; and Charnock, one of the two that remained, was made vice-president.

In 1688, a second declaration for liberty of conscience

Britain.

²⁷¹ James sends an ambassador to Rome.

²⁷² Dispute with the university of Cambridge.

²⁷³ College filled with Catholics.

Britain. science was published almost in the same terms with the former; but with this peculiar injunction, that all divines should read it after service in their churches. The clergy resolved to disobey this order. Loyde bishop of St Asaph, Kenn of Bath and Wells, Turner of Ely, Lake of Chichester, White of Peterborough, and Trelawney of Bristol, together with Sancroft the primate, concerted an address in form of a petition to the king, which, with the warmest expressions of zeal and submission, remonstrated that they could not read his declaration consistent with their consciences or the respect they owed the Protestant religion. The king received their petition with marks of surprise and displeasure. He said he did not expect such an address from the church of England, particularly from some amongst them; and persisted in his orders for their obeying his mandate.

274 Bishops imprisoned. As the petition was delivered in private, the king summoned the bishops before the council, and there questioned them whether they would acknowledge it. They for some time declined giving an answer; but being urged by the chancellor, they at last owned the petition. On their refusal to give bail, an order was immediately drawn for their commitment to the Tower, and the crown lawyers received directions to prosecute them for a seditious libel. The king gave orders that they should be conveyed to the Tower by water, as the whole city was in commotion in their favour. The people were no sooner informed of their danger, than they ran to the river-side in prodigious multitudes, craving their blessing; calling upon heaven to protect them, &c. The very soldiers by whom they were guarded, kneeled down before them, and implored their forgiveness.

275 The whole city in commotion in their favour. The 29th of June 1668 was fixed for the trial of the bishops; and their return was still more splendidly attended than their imprisonment. Twenty-nine peers, a great number of gentlemen, and an immense crowd of people, waited upon them to Westminster-hall. The dispute was learnedly managed by the lawyers on both sides. The jury withdrew into a chamber where they passed the whole night; but next morning they returned into court, and pronounced the bishops not guilty. Westminster-hall instantly rang with loud acclamations, which were communicated to the whole extent of the city. They even reached the camp at Hounslow, where the king was at dinner in lord Feversham's tent. His majesty demanding the cause of those rejoicings, and being informed that it was nothing but the soldiers shouting for the delivery of the bishops; "Call you that nothing! (cried he); but so much the worse for them." Immediately after this, the king struck out two of the judges, Powel and Holloway, who had appeared to favour the bishops. He issued orders to prosecute all those clergymen who had not read his declaration, and all had refused it except 200. He sent also a mandate to the new fellows whom he had obtruded on Magdalen college, to elect for president, in the room of Parker lately deceased, one Gifford, a doctor of the Sorbonne, and titular bishop of Madura.

276 They are acquitted. 277 Attachment of the army to the Protestant religion. As the king found the clergymen every where averse to his measures, he was willing next to try what he could do with the army. He thought if one regiment should promise implicit obedience, their example would soon induce others to comply. He therefore ordered

one of the regiments to be drawn up in his presence, and desired that such as were against his late declaration of liberty of conscience should lay down their arms. He was surprised to see the whole battalion ground their arms, except two officers and a few Roman-catholic soldiers.—A fortunate circumstance happened about this time in his family. A few days before the acquittal of the bishops, the queen was brought to bed of a son, who was baptized by the name of JAMES. This would, if any thing could at that time, have served to establish him on the throne: but so great was the animosity against him, that a story was propagated that the child was supposititious; and so great was the monarch's pride, that he scorned to take any precautions to refute the calumny.

278 Birth of a prince of Wales. Though the enthusiasm of James himself bordered upon madness, the most wild of his religious projects seem to have been suggested by his enemies to accomplish his ruin. The earl of Sunderland, whom he chiefly trusted, was a man of abandoned principles, insatiable avarice, and fitted by nature for stratagem, deception, and intrigue. The love of money was his ruling passion, and he sold his influence to the highest bidder. To such a degree was he mercenary, that he became at once the pensioner of the prince of Orange and of the king of France. The former, who had long fixed his eye on the English throne, watched James's motions, and took every advantage of his errors. He had laid his schemes so extensively, that nothing but the birth of a male heir to the crown of England could possibly prevent him from an almost immediate possession of the kingdom. He had the address to render two-thirds of the powers of Europe interested in his success. The treaty of Augsburg, formed to break the power of France, could not accomplish its object without the accession of England. The house of Austria, in both its branches, preferred their political views to their zeal for the Romish faith, and promoted the dethronement of James as the only means to humble Louis XIV. Odescalchi, who under the name of Innocent XI. filled then the papal chair, was gained to the measures of the prince of Orange by other considerations, as well as through his fixed aversion to France. The prince of Orange sent his intimate friend the prince of Vaudemont to Rome, to procure the aid of the Pope. He explained to his Holiness, that the Catholic princes were in the wrong to expect any advantage to their faith from James, as his being a declared Papist rendered his people averse to all his measures. As for himself, should he have the good fortune to mount the throne of England, he might take any step in favour of the Roman-catholics without jealousy: and he promised to procure a toleration for the Papists, should the Pope, the emperor, and the king of Spain, favour his attempt. This negotiation procured the desired effect. Innocent contributed, with the money of the church, to expel a Roman-catholic prince from his throne.

279 Treachery of Sunderland. 280 Schemes of the prince of Orange. Though the contest with the bishops had completed the king's unpopularity, he derived the suddenness of his ruin from the birth of a prince of Wales. That circumstance increased the fears of his subjects in proportion as it raised his security and hopes. In the reign of a prince to be educated under the prejudices of such a father, nothing but a continuance of the same unconstitutional measures could be expected. So low indeed

Britain. was his credit sunk among his people at this time, and such prescience they all seemed to have of his fate, that the child had like to have died before a wet nurse could be procured to suckle him.

281 He applies to James's subjects; The prince of Orange, seeing the national discontent now raised to the highest pitch, resolved to take advantage of it. He began by giving one Dykevelt, his envoy, instructions to apply in his name to every religious sect in the kingdom. To the church-party he sent assurances of favour and regard; and protested, that his education in Holland had no way prejudiced him against episcopacy. To the nonconformists he sent exhortations, not to be deceived by the insidious caresses of their known enemy, but to wait for a real and sincere protector, &c. In consequence of these insinua-

282 By whom he is invited into England. tions, the prince soon received invitations from the most considerable persons in the kingdom. Admirals Herbert and Russel assured him in person of their own and the national attachment. Henry Sidney, brother to Algernon, and uncle to the earl of Sunderland, came over to him with assurances of an universal combination against the king. Lord Dumblaine, son to the earl of Danby, being master of a frigate, made several voyages to Holland, and carried from many of the nobility tenders of duty and even considerable sums of money to the prince of Orange. Soon after, the bishop of London, the earls of Danby, Nottingham, Devonshire, Dorset, and several other lords, gentlemen, and principal citizens, united in their addresses to him, and intreated his speedy descent. The people, though long divided between whig and tory, now joined against their unhappy sovereign as a common enemy. William therefore determined to accept of their invitations; and this the more readily, as he perceived the malecontents had conducted themselves with prudence and secrecy. Having the principal servants of James in pay, he was minutely informed of the most secret actions and even designs of that prince. His intelligence came through Sidney from Sunderland, who betrayed the very measures which he himself had advised. The prince had a fleet ready to sail, and troops provided for action, before the beginning of June 1688.

283 James warned of his danger by Louis XIV. The king of France was the first who gave James warning of his danger, and offered to assist him in repelling it. But he declined this friendly offer, lest it should be said that he had entered into a private treaty with that monarch to the prejudice of the Protestant religion. Being also deceived and betrayed by Sunderland, he had the weakness to believe, that the reports of an invasion were invented in order to frighten him into a strict connection with France. He gave credit to the repeated assurances of the states, that the armament prepared in their ports was not designed against England. Nay, he even believed the assertions of the prince himself, whose interest it was to deceive. Sunderland descanted against the possibility of an invasion, and turned to ridicule all who believed the report. Having by the prior consent of James taken possession of all the foreign correspondence, he suppressed every intelligence that might alarm; and even all others whom James trusted, except Dartmouth, affected long to give no faith to the reports of an invasion.

284 He rejects all assistance. Louis finding his first offers rejected, next proposed to march down his army to the frontiers of the Dutch provinces, and thus detain their forces at home for

their own defence. But this proposal met with no better reception than the former. Still Louis was unwilling to abandon a friend and ally whose interest he regarded as closely connected with his own. He ventured to remonstrate with the Dutch against the preparations they were making to invade England. The Dutch treated his remonstrance as an officious impertinence, and James himself declined his mediation.

285 The king of England, having thus rejected the assistance of his friends, and being left to face the danger alone, was astonished with an advice from his minister in Holland, that an invasion was not only projected but avowed. When he first read the letter containing this information, he grew pale, and the letter dropt from his hand. He saw himself on the brink of destruction, and knew not to whom to apply for protection. In this emergency, Louis wrote to James in his own hand, that to divert the Dutch from their intended invasion of England, he would lay siege to Maastricht with 30,000 men. James communicated this intelligence to Sunderland, and he to the prince of Orange. Six thousand men were thrown into Maastricht; and the design of Louis, as being impracticable, was laid aside. On this Louis being disgusted with James, turned his arms towards Germany. The dauphin laid siege to Philipsburg, on the 5th of October; and prince Clement of Bavaria, by throwing a strong garrison into Cologne, effectually secured the states of Holland from any sudden danger from the arms of France.

286 He is again betrayed by Sunderland. James had now no resource but in retreating from those precipitate measures which had plunged him into an extricable distress. He paid court to the Dutch, and offered to enter into any alliance with them for their common security. He replaced in all the counties of England all the deputy lieutenants and justices who had been deprived of their commissions for their adherence to the test and penal laws. He restored the charters of such corporations as he had possessed himself of; he annulled the high commission court; he reinstated the expelled president and fellows of Magdalen college; and was even reduced to caress those bishops whom he had so lately persecuted and insulted.

287 James attempts to pacify his subjects. All these concessions, however, were now too late; they were regarded as the effects of fear and not of repentance. Indeed, it is said, he very soon gave proofs of his insincerity: for hearing that the Dutch fleet was dispersed, he recalled those concessions he had made in favour of Magdalen college; and to show his attachment to the Romish church, at the baptism of the prince of Wales, he appointed the pope one of the sponsors.

288 But in vain. In the mean time, William set sail from Helvoetsluys with a fleet of near 500 vessels, and an army of above 14,000 men. Fortune, however, seemed at first every way unfavourable to his enterprise. He was driven back by a dreadful storm; but he soon refitted his fleet, and again set sail for England. It was given out that this invasion was designed for the coasts of France; and many of the English, who saw the fleet pass along their coasts, little suspected the place of its destination. It happened that the same wind which sent the Dutch to their place of destination, detained the English fleet in the river; so that the Dutch passed the straits of Dover without molestation; and after a voyage of

Britain. of two days, landed at Broxholme in Torbay, on the 5th of November, the anniversary of the gunpowder treason.

But though the invitation from the English was very general, the prince for some time had the mortification to find himself joined by very few. He continued for ten days in expectation of being joined by the malecontents, and at last was going to despair of success. But just when he began to deliberate about reembarking his forces, he was joined by several persons of consequence, and the whole country soon after flocked to his standard. The first person that joined the prince was major Burrington, and he was quickly followed by the gentry of the counties of Devon and Somerset. Sir Edward Seymour made proposals for an association, which was signed by great numbers; and every day there appeared some effect of that universal combination into which the nation had entered against the measures of the king.

290
Defection
of king
James's
army.

This was followed by the defection of the army. Lord Colchester, son to the earl of Rivers, first deserted to the prince. Lord Cornbury, son to the earl of Clarendon, carried off the greatest part of three regiments of cavalry at once; and several officers of distinction informed Feversham their general, that they could not in honour fight against the prince of Orange. Soon after this the unhappy monarch found himself deserted by his own servants and creatures. Lord Churchill had been raised from the rank of a page, and had been invested with an high command in the army; he had been created a peer, and owed his whole fortune to the king's bounty: yet even he deserted among the rest; and carried with him the duke of Grafton natural son to the late king, colonel Berkly, and some others.

291
Distressed
situation of
the king.

In this universal defection, James, not knowing where to turn, began to think of requesting assistance from France when it was now too late. He wrote to Leopold emperor of Germany: but in vain; that monarch only returning for answer, That what he had foreseen had happened. James had some dependence on his fleet; but they were entirely disaffected. In a word, his interests were deserted by all, for he had long deserted them himself. He still found his army, however, to amount to 20,000 men; and had he led them immediately to battle, it is possible they might then have fought in his favour. But James's misfortunes had deprived him of his natural firmness and resolution; and seeing himself deserted by those in whom he thought he could have placed most confidence, he became suspicious of all, and was in a manner deprived even of the power of deliberation. In this extremity of distress, the prince of Denmark, and Anne James's favourite daughter, perceiving the desperation of his circumstances, cruelly resolved to take part with the prince of Orange. When the king was informed of this, he was stung with the most bitter anguish. "God help me (cried he), my own children have forsaken me." To add to his distress as a parent, he was accused of being accessory to the death of his own child. Her nurse, and her uncle the earl of Clarendon, went up and down like distracted persons, affirming that the Papists had murdered the princess. They publicly asked the queen's servants whither they had conveyed her? and they contributed to inflame the populace, whose zeal had already inflamed them to tumult and disorder. It was, however,

soon known that she fled, under the conduct of the bishop of London, to Northampton.

On the 30th of November 1688, James sent three of his noblemen to treat with the prince of Orange. But though the latter knew very well that the king's commissioners were in his interests, his behaviour showed plainly that he now thought the time of treating was past. For some time he would not admit them to an audience; and when he did, would give no satisfactory answer. James now began to be afraid of his personal safety. But what most affected him was the terrors of the queen for herself and her infant son. He therefore resolved to send them abroad. They crossed the river in a boat, at Whitehall, in a stormy and rainy day. They were carried to Gravesend in a coach, under the conduct of the count de Lauzun. A yacht, commanded by captain Gray, which lay there ready for the purpose, soon transported them in safety to Calais.

292
Haughty
behaviour
of William.

The king was now so dispirited and distracted, that he resolved to leave the kingdom at once, and thus throw every thing into confusion. He threw the great seal into the Thames; he left none with any authority to conduct affairs in his absence; and he vainly hoped to derive advantage to his affairs from anarchy and disorder. About twelve at night, on the 10th of December, he disguised himself, took a boat at Whitehall, and crossed the river. Sir Edward Hales, with another friend, met him at Vauxhall with horses. He mounted; and being conducted through by-ways by a guide, he passed in the night-time to the Medway, which he crossed by Aylesford-bridge. At Woolpeck he took fresh horses, sent thither before by Sheldon one of his equerries who was in the secret of his flight. He arrived at 10 o'clock at Embyferry near Feversham, where a customhouse hoy, hired by Sir Edward Hales, lay ready to receive them on board. But the wind blew fresh, and the vessel had no ballast. The master, therefore, easily persuaded the king to permit him to take in ballast at Shilness. It being half ebb when they ran ashore, they designed to sail as soon as the vessel should be afloat. But when the vessel was almost afloat, she was boarded by three fisher-boats belonging to Feversham, containing 50 men. They seized the king and his two companions, under pretence of their being Papists that wanted to escape from the kingdom. They turned up Feversham water with the tide; but still the king remained unknown. Sir Edward Hales placed privately 50 guineas in the hands of the captain, as an earnest of more should he permit them to escape. He promised: but was so far from keeping his word, that he took what money they had, under pretence of securing it from the seamen; and having possessed himself of their all, he left them to their fate. The unfortunate fugitives were at length carried in a coach to Feversham, amid the insults, clamours, and shouts of the sailors. When the king was brought to the inn, a seaman who had served under him knew him, and melted into tears; and James himself was so much moved at this instance of his affection, that he wept. The other fishermen who had treated him with such indignity before, when they saw his tears, fell upon their knees. The lower inhabitants of the whole village gathered round him; but the better sort fled from his presence. The seamen, however, formed themselves into a guard round him,

293
James at-
tempts to
leave the
kingdom.

294
Is seized and
insulted.

Britain.
295
His great
distress.

him, and declared, that "a hair of his head should not be touched." In the mean time, Sir James Oxendon, under the pretence of guarding him from the rabble, came with the militia to prevent his escape. The king found a change in his condition when he was taken out of the hands of the sailors. The commanders of the militia showed him no respect. He was even insulted by the common soldiers. A letter which he intended to send to London for clothes, a change of linen, and some money, was stopped by those who pretended to protect his person.

All things in the mean time ran into confusion at London, and the prince of Orange exercised in his own person all the functions of royalty. He issued a declaration to the disbanded army to reassemble themselves. He ordered the secretary at war to bring him a list of the king's troops. He commanded the lord Churchill to collect his troop of horse-guards. He sent the duke of Grafton to take possession in his name of Tilbury fort. The assembly of peers adjourned to the council-chamber at Whitehall; and, to give the appearance of legality to their meeting, chose the marquis of Halifax for their president. While this assembly was sitting, on the 13th of December, a poor countryman, who had been engaged by James, brought an open letter from that unfortunate prince to London. It had no superscription; and it was addressed to none. It contained, in one sentence only, his deplorable condition when in the hands of a desperate rabble. This poor messenger of their fallen sovereign had long waited at the council door, without being able to attract the notice of any who passed. The earl of Mulgrave at length, apprised of his business, had the courage to introduce him to the council. He delivered his open letter, and told the state of the king with tears. The assembly were so much moved, that they sent the earl of Feversham with 200 of the guards towards Feversham. His instructions were to rescue him first from danger, and afterwards to attend him to the sea-coast, should he choose to retire. He chose, however, to return to London; but the prince of Orange sent a message to him, desiring him to advance no nearer the capital than Rochester. The messenger missed James by the way. The king sent Feversham with a letter to the prince of Orange, requesting his presence in London to settle the nation. He himself proceeded to that place, and arrived on the 16th of December. Doubting the fidelity of the troops who were quartered at Westminster, he chose to pass through the city to Whitehall. Never prince returning with victory to his capital was received with louder acclamations of joy. All the streets were covered with bonfires. The bells were rung, and the air was rent with repeated shouts of gladness. All orders of men crowded to his coach; and when he arrived at Whitehall, his apartments were crowded with people who came to express their joy at his return.

296
James re-
turns to
London.

297
Command-
ed by Wil-
liam to
leave his
palace.

The prince of Orange received the news of his return with an haughty air. His aim from the beginning was to force him by threats and severities to relinquish the throne. The Dutch guards were ordered to take possession of Whitehall, and to displace the English. The king was soon after commanded by a message, which he received in bed at midnight, to leave his palace next morning, and to depart for Ham, a seat of the duchess of Lauderdale's. He desired,

however, permission to retire to Rochester, a town not far from the sea-coast, and opposite to France. This was readily granted: and it was now perceived that the harsh measures of the prince had taken effect, and that the king meditated an escape to France.

The king, surrounded by the Dutch guards, arrived at Rochester on the 19th of December. The restraint put upon his person, and the manner in which he had been forced from London, raised the indignation of many, and the compassion of all. The English army, both officers and soldiers, began to murmur; and had it not been for the timidity and precipitation of James himself, the nation had certainly returned to their allegiance. He remained three nights at Rochester, in the midst of a few faithful friends. The earls of Ar-
ran, Dumbarton, Ailesbury, Litchfield, and Middle-
ton, werethere; and, with other officers of merit, the gal-
lant lord Dundee. They argued against his flight with united efforts. Several bishops, some peers, and many officers, intreated his stay in some part of England. Message followed message from London. They represented that the opinions of men began to change, and that events would daily rise in favour of his authority. Dundee added his native ardour to his advice. "The question, Sir, (said he), is, Whether you shall stay in England, or fly to France? Whether you shall trust the returning zeal of your native subjects, or rely on a foreign power? Here you ought to stand. Keep possession of a part, and the whole will submit by degrees. Resume the spirit of a king. Summon your subjects to their allegiance. Your army, though disbanded, is not dispersed. Give me your commission. I will gather 10,000 of your troops. I will carry your standard at their head through England, and drive before you the Dutch and their prince." The king replied, "that he believed it might be done; but that it would raise a civil war, and he would not do so much mischief to a nation that would so soon come to their senses again." Middleton urged his stay, though in the remotest part of the kingdom. "Your majesty (said he) may throw things into confusion by your departure; but it will be but the anarchy of a month: a new government will soon be settled, and you and your family will be ruined." These spirited remonstrances had no effect upon James. He resolved to quit the kingdom; and having communicated his design to a few of his friends, he passed at midnight through the back-door of the house where he lodged, and with his son the duke of Berwick, and Biddulph one of his servants, went in a boat to a smack which lay waiting for him without the fort of Sheerness. By reason of a hard gale they were forced to bear up toward Leigh, and to anchor on the Essex-side, under the lee of the land. When the gale slackened, they reached the Buoy of the Narrows without tacking; but not being able to weather the Goodwin, they were forced to sail through the Downs. Seven ships lay there at anchor; but the smack passed unquestioned along. Unable to fetch Calais, she bore away for Boulogne, and anchored before Ambleteuse. The king landed at three o'clock in the morning of Tuesday, December 25th; and taking post, soon joined his queen at St Germain's.

James having thus abandoned his dominions, the prince of Orange remained master of them of course. By the advice of the house of lords, the only member

Britain.

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He is press-
ed to stay
in the king-
dom;

299
But refused.

300
He lands in
France.

³⁰¹ Britain. of the legislature remaining, he was desired to summon a parliament by circular letters; but the prince, unwilling to act upon so imperfect an authority, convened all the members who had sat in the house of commons during any parliament of Charles II. and to these were added the mayor, aldermen, and fifty of the common council of London; and the prince, being thus supported by an assembly deriving its authority from himself, wrote circular letters to the counties and corporations of England to call a new parliament.

The throne declared vacant. The house being met, which was mostly composed of the Whig party, thanks were given to the prince of Orange for the deliverance he had brought them; after which they proceeded to settle the kingdom. A vote soon passed both houses, that king James II. having endeavoured to subvert the constitution of the kingdom, by breaking the original contract between the king and his people, and having by the advice of Jesuits and other wicked persons violated the fundamental laws, and withdrawn himself out of the kingdom, had abdicated the government; and that the throne was thereby vacant.

³⁰² William raised to the sovereignty. The king being thus deposed, it was easy for William to get himself appointed as his successor. Proposals were made for electing a regent. Others were for investing the prince of Orange with regal power, and declaring the young prince supposititious. To these proposals, however, William opposed the following decisive argument, viz. that "he had been called over to defend the liberties of the British nation, and that he had happily effected his purpose; that he had heard of several schemes proposed for the establishing of the government; that, if they chose a regent, he thought it incumbent upon him to inform them that he would not be that regent; that he would not accept of the crown under the prince's his wife, though he was convinced of her merits; that therefore, if either of these schemes was adopted, he could give them no assistance in the settlement of the nation; but would return home to his own country, satisfied with his aims to secure the freedom of theirs." Upon this, after a long debate in both houses, a new sovereign was preferred to a regent by a majority of two voices. It was agreed that the prince and princess of Orange should reign jointly as king and queen of England; while the administration of government should be placed in the hands of the prince only. The marquis of Halifax, as speaker of the house of lords, made a solemn tender of the crown to their highnesses, in the name of the peers and commons of England. The prince accepted the offer; and that very day, February 13th 1689, William and Mary were proclaimed king and queen of England.

Though Mary was comprehended in the royal title, she never possessed either the authority of a queen, or the influence of a wife. Her easy temper had long been subdued by the stern severity of a husband who had very few amiable qualities. Being brought up in a manner under the tuition of her spouse, and in some degree confined by his orders, she was accustomed to adopt implicitly his political maxims and even his thoughts; and in consequence of her want of importance with him, she ceased to be an object of consequence in the eyes of the nation.

William began his reign with issuing a proclamation

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for continuing in office all Protestants that had been in place on the first of the preceding December. On the 17th of the month he formed his privy council, which consisted chiefly of such persons as had been most active in raising him to the throne. To gratify as many as possible of his friends, the several boards, and even the chancery, were put into commission. The benches of the exchequer and common law were filled with persons who had distinguished themselves against the measures of the late king. The earl of Nottingham who had violently opposed the elevation of William, and the earl of Shrewsbury who had adhered to his views, were made secretaries of state. The marquis of Halifax, and the earl of Danby, though rivals in policy, were admitted into the cabinet; the first as lord privy seal, the second as president of the council. His Dutch friends in the mean time were not forgotten by the king. Bentinck, his favourite, was made a privy counsellor, groom of the stole, and privy purse. Auverquerque was appointed master of the horse. Zuylstein received the office of master of the robes. Schomberg was placed at the head of the ordnance.

Though these instances of gratitude were no doubt necessary to William, the generality of the nation were displeased. The Tories were offended at being excluded from his favour, especially as they had departed from their principles in order to serve him. The nation in general were much prejudiced against foreigners, and universal discontent ensued upon seeing them preferred. The king, who had been bred a Calvinist, was also very strongly inclined to favour that sect; and his prejudices in favour of Calvinism were almost equal to those of James in favour of Popery. Finding, therefore, the clergy of the church of England little inclined to take the oaths to the new government, he began openly to indulge his own prejudices in favour of dissenters. Having come to the house of lords to pass some bills, on the 16th of March, he made a speech, urging the necessity of admitting all Protestants indiscriminately into the public service. He told his parliament, that he had something to communicate, which would conduce as much to their settlement as to the disappointment of their enemies. He informed them, that he was employed in filling up the vacancies in offices of trust; and he hoped that they were sensible of the necessity of a law to settle the oaths to be taken by such persons as should be admitted into place. As he doubted not, he said, that they would sufficiently provide against Papists, so he hoped that they would leave room for the admission of all Protestants that were able and willing to serve.

This proposition was rejected with vehemence. The adherents of the church complained that the ruin which they feared from the Papists in the preceding reign was now to be dreaded from the Protestant dissenters. They affirmed, that if the established religion was to be destroyed, it mattered little by whose hands it must fall. A bill brought in by the ministry for abrogating the former oaths of supremacy and allegiance was rejected.

An attempt to dispense with the sacramental test was made without success in another form. The court-party proposed that any man should be sufficiently qualified for an office by producing a certificate of his having received the sacrament in any Protestant congregation.

Britain.

³⁰³ National discontent.

³⁰⁴ His scheme in favour of dissenters rejected.

³⁰⁵ Britain. gation. But this motion was also rejected in the house of lords by a great majority. William repeated his attempts of a comprehension; but he was ultimately unsuccessful, and in the coronation-oath the church-party inserted a clause highly favourable to themselves, viz. that the king should maintain the Protestant religion "as established by law." To this clause William is said to have discovered an apparent unwillingness to swear.

³⁰⁵ Tottering condition of William's government. For these and other reasons the government of William was for some time but in a very tottering condition. The king, either through want of health or inclination, interfered but little in the affairs of the nation. Ireland was strangely neglected. Halifax and Danby, who had in a manner raised the king to the throne, caballed with his enemies. They perceived that the people, with the same levity that induced them to desert their former sovereign, were beginning to be discontented with their new prince. Every thing seemed to tend to a change. Halifax himself declared, that were James to conform with the Protestants, he could not be kept four months from reascending his throne. Danby averred, that, were the late king to give satisfaction for the security of religion, it would be difficult to oppose his restoration. From these apparent discontents of the nation, the friends and emissaries of James assumed more boldness. They tampered with the servants of the crown, and inflamed the army. The former they alarmed with the prospect of a sudden change; the latter they roused into indignation by the manifest preference given by William to his countrymen the Dutch.

³⁰⁶ He is acknowledged king in Scotland. Though the kingdom of Scotland did not at first recognize the authority of William, yet the party of James never attained sufficient strength to be of any effectual service to him in that kingdom. Thirty Scots peers, and near 80 gentlemen, then in London, had waited in the beginning of January on the prince of Orange. Without any authority from the regency still subsisting in Edinburgh, they formed themselves into a kind of convention. The prince of Orange in a formal manner asked their advice. He withdrew, and they adjourned to the council-chamber at Whitehall. The duke of Hamilton being chosen president, explained the distracted state of Scotland. He represented, that disorders, anarchy, and confusion, prevailed; and he urged the necessity of placing the power somewhere till a convention of states should be called to form a lasting and solid settlement. When the heads of their address to the prince of Orange were settled, and ordered to be ingrossed, the earl of Arran unexpectedly arose, and proposed to invite back the king. The meeting, however, adhered to the prince of Orange; and waited on him in a body, requesting him to take the administration into his hands. He thanked them for the trust they had reposed in him; and a convention was ordered to meet at Edinburgh on the 14th of March, and it was provided that no exception or limitation whatever should be made, except that the members should be Protestants.

A secession, however, was made from this convention, in favour of James. The archbishop of Glasgow, the earl of Balcarras, and the viscount Dundee, were authorized by an instrument signed by the late king, at that time in Ireland, to call a convention of

the states at Stirling. But this measure was disappointed, first by the wavering disposition of the marquis of Athol, and afterwards by the delay and folly of the party. At last, the viscount Dundee, being alarmed by an information of a design formed by the covenanters to assassinate him, left Edinburgh at the head of 50 horse. When he passed under the walls of the castle, the duke of Gordon, who held that place, and favoured the cause of James, called him to a conference. He scrambled up the precipice, and informed the duke of his designs in favour of the late king. He conjured him to hold out the castle, under a certainty of being relieved. The novelty of the sight collected multitudes of spectators. The convention were alarmed. The president ordered the doors to be locked, and the keys to be laid upon the table. The drums were beat to alarm in the town. A parcel of ill-armed retainers were gathered together in the street by the earl of Leven. Dundee in the mean time rode off with his party. But when they found themselves secure, the duke of Hamilton adjourned the convention, which relieved the adherents of James from dreadful apprehensions for their own safety. Fifty members retired from Edinburgh; and that circumstance procured an unanimity in all the succeeding resolutions of the convention. Soon after this, it was determined in a committee, that James had *forefaulted* his right to the crown, by which was meant that he had perpetually excluded himself and his whole race from the crown, which was thereby become vacant. This resolution was approved by the convention, and another was drawn up for raising William and Mary to the vacant throne; in consequence of which they were proclaimed at Edinburgh on the 11th of April 1689.

The castle of Edinburgh was still kept, in the name of James, by the duke of Gordon: but despairing of any relief, and pressed by a siege, he surrendered it on the 13th of June, upon honourable terms. The adherents of James, terrified with this unexpected misfortune, now turned their eyes to the viscount Dundee. That nobleman having been in vain urged by the convention to return, they had declared him a fugitive, an outlaw, and a rebel. General Mackay had been sent to Scotland by William with four regiments of foot, and one of dragoons; and Dundee being apprised of his design to surprise him, retired to the Grampian mountains with a few horse. He marched from thence to Gordon castle, where he was joined by the earl of Dunfermline with 50 gentlemen. He then passed through the county of Murray to Inverness. Macdonald of Keppoch lay with 700 men before that town; after having ravaged, in his way from his own country, the lands of the clan of Macintosh. Dundee having promised to the magistrates of Inverness to repay, at the king's return, the money extorted from them by Macdonald, induced the latter to join him with all his men. He could not prevent them, however, from first returning home with their spoil. He accompanied them to Lochaber, and on the 8th of May arrived in Badenoch. From thence he wrote letters to the chiefs of all the clans, appointing them to meet at a general rendezvous in Lochaber, on the 18th of the same month. In the mean time, passing suddenly through Athol, he surprised the town of Perth. In hopes of gaining to his party the two troops of Scots dragoons who

³⁰⁷ Attempts of lord Dundee in favour of James.

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who lay at Dundee, he marched suddenly to that place: but the fidelity of captain Balfour, who commanded them, disappointed his views. Having raised the land-tax as he passed, Dundee returned through Athol and Rannoch to hold the diet of rendezvous at Lochaber. Here he was reinforced by several Highland chieftains, so that his army amounted to 1500 men. He pursued Mackay for four days, who had advanced to Inverness, but afterwards retreated to Strathbogie, leaving the whole Highlands exposed to the enemy.

Soon after, however, Dundee found himself surrounded with many difficulties. The officers of the Scots dragoons, who held a secret correspondence with him, wrote him false intelligence, as an excuse for their own fears. They informed him, that a party of Irish, who had endeavoured to land in Scotland, under the duke of Berwick, were driven back, and the duke himself taken prisoner; and that Mackay had been reinforced with a regiment of English horse, and another of foot. On this intelligence, Dundee retreated to Badenoch. The natives of the low country who served in his army quitted him without leave; and the Highlanders plundered the country wherever they came: at last he himself fell sick, while Mackay hovered on his rear. A slight skirmish happened, in which the Highlanders prevailed; but they lost their baggage during the action. Dundee at length arrived at Ruthven; but Mackay being reinforced with a body of 1200 men advanced against him, and other regiments had arrived at Perth and Dumblain. The Highlanders now deserted every night by hundreds; their gallant leader himself was forced to retire to Lochaber, where only 200 of his whole force remained with him; and to complete his misfortunes, he received at the same time news of the surrender of the castle of Edinburgh.

On the 23d of June, letters arrived from king James, with a promise of immediate succours from Ireland; upon which Dundee ordered the neighbouring clans to assemble round his standard. But still he had scarce any thing but the mere bodies of his men with which he could prosecute the war. The Highlanders were armed only with their own proper weapons, and he had no more than 40 pounds of powder in his whole army. All difficulties, however, were surmounted by the active

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He is slain at
Killcranky

spirit of the general, for whom the army entertained an enthusiastic zeal. On the 17th of July, he met the king's forces under general Mackay, near the pass of Killcranky. An engagement ensued, in which the Highlanders were victorious. Two thousand of Mackay's men were lost either in the field or in the pursuit; but the victory cost the Highlanders very dear, for their brave general was mortally wounded. He survived the battle, however; and wrote an account of the victory to king James: he even imagined his wound was not mortal; but he died the next morning at Blair. With him ended all the hopes of James in Scotland. Colonel Cannon, who succeeded Dundee in the command, possessed neither his popularity nor his abilities. After some insignificant actions, in which the valour of the soldiers was more conspicuous than the conduct of their leader, the Highlanders dispersed themselves in disgust; and the war soon after ended favourably for William, without any repulse given to his enemies.

During the troubles in England, which had terminated in placing William on the throne, the two parties

in Ireland were kept in a kind of tranquillity by their mutual fears. The Protestants were terrified at the prospect of another massacre; and the Papists expected every day to be invaded by the joint force of the English and Dutch. Their terrors, however, were ill founded; for though Tyrconnel sent several messages to the prince, that he was ready to deliver up the kingdom to any force that might make a surrender decent, his offers were always rejected. William was persuaded by the marquis of Halifax, that, should Ireland yield, no pretence could remain for keeping an army in pay; that then, having no army to protect his authority, he might as easily be turned out as he had been brought in; that the English nation could never remain long in a state of good humour; and that he might perceive they already began to be discontented. These insidious arguments induced William to neglect Ireland in such a manner as is justly looked upon to be one of the greatest blemishes in his whole reign. His enemies, indeed, though perhaps without any good foundation, assign a worse cause; viz. that should England be confirmed under his government, Ireland could not long hold out; and that the obstinacy of his Irish enemies would give a pretence for forfeitures to gratify his English, but especially his foreign friends.

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Ireland neglected by
William.

Tyrconnel, disappointed in his views of surrendering Ireland to the prince of Orange, affected to adhere to James. The whole military force of the kingdom at that time amounted only to 4000 men, and of these only 600 were in Dublin; and what was still worse, all of them were so much disposed to quit the service, that the lord deputy was obliged to issue commissions for levying new forces. Upon this, an half-armed rabble, rather than army, rose suddenly in various parts of the kingdom. Having no pay from the king, they subsisted by depredation, and regarded no discipline. The Protestants in the north armed themselves in their own defence; and the city of Londonderry, relying on its situation, and a slight wall, shut its gates against the new-raised army. Protestant parties in the mean time rose every where, declaring their resolution to unite in self-defence, to preserve the Protestant religion, to continue their dependence on England, and to promote the meeting of a free parliament.

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An insurrection in
favour of
James.311
Protestants
take arms in
their own
defence.

To preserve appearances, William now sent general Hamilton, an Irishman and a Roman-catholic, to treat with Tyrconnel; but instead of persuading that lord to yield to William, this messenger advised him to adhere to James. In the mean time James himself assured the lord deputy, that he was ready to sail from Brest with a powerful armament. Hamilton, assuming spirit from the hopes of this aid, marched against the northern insurgents. They were routed with considerable slaughter at Drumore; and Hillsborough, where they had fixed their head-quarters, was taken without resistance: the city of Londonderry, however, resolved to hold out to the last extremity.

312
They are
defeated at
Drumore.

On the 7th of March 1689, James embarked at Brest. The whole force of his expedition consisted of 14 ships of war, 6 frigates, and 3 fire-ships. Twelve hundred of his native subjects in the pay of France, and 100 French officers, composed the whole army of James. He landed at Kinsale without opposition on the 12th of the month, where he was received with the utmost demonstrations of joy. His first care was to secure, in

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James lands
in Ireland.

Britain.

the fort of Kinsale. the money, arms, and ammunition, which he brought from France; and put the town in some posture of defence: which having done, he advanced to Corke. Tyrconnel arrived at this place soon after, and brought intelligence of the rout at Drumore. The king was so much pleased with his attachment and services, that he created him a duke; after which he himself advanced towards Dublin. The condition of the rabble, who poured round him under the name of an *army*, was not calculated to raise his hopes of success. The most of them were only provided with clubs; some had sticks tipped with iron; and even of those who were best armed, scarce two in a hundred had muskets fit for service. Their very numbers distressed their sovereign, and ruined the country; inso-much that James resolved to disband the greatest part of them. More than 100,000 were already on foot in the different parts of the island. Of these he reserved 14 regiments of horse and dragoons, and 35 regiments of foot; the rest he ordered to their respective homes, and armed those that were retained in the best manner he could.

Being received at Dublin with an appearance of universal joy, James proceeded immediately to business. He ordered, by proclamation, all Protestants who had abandoned the kingdom to return. He commanded, in a second proclamation, all Papists, except those in his army, to lay up their arms, and put an end to the robberies and depredations which they had committed in the violence of their zeal. He raised the value of the currency by a proclamation; and he summoned a parliament to meet on the 7th of May, to settle the affairs of the kingdom. The Protestant clergy represented their grievances in an address; and the university of Dublin appeared with complaints and congratulations. He assured the first of his absolute protection, and a full redress; and he promised the latter not only to defend, but even to enlarge, their privileges.

314
Is forced to
raise the
siege of
London-
derry.

† See Lon-
donderry.

315
Is driven in-
to disagree-
able mea-
sures.

On the 8th of April, James left Dublin, resolving to lead his army against the insurgents in person. They retired before him, and the king laid siege to Londonderry. The besieged made such a vigorous resistance as has made the place remarkable ever since †: but being reduced to the last extremity, they would have been obliged to surrender, had not they been relieved on the 28th of July by seven ships laden with provisions; upon which the siege was immediately raised.

In the mean time, the distressed situation of James, and his absolute dependence upon France, drove him into measures which otherwise he never would have thought of. His soldiers for some time had been supported by their officers, or subsisted by depredation. The funds of the officers were at last exhausted, and the country itself could no longer bear the riot and injustice of the soldiers. Pressed by these difficulties, James, by the advice of his council, resolved to coin pieces of copper, which should be received for silver. He saw well enough the inconveniences of this measure; but all Ireland possessed not the means of paying the army in current coin to the middle of June. Of the French remittances only 200,000 livres remained; and the king found it absolutely necessary to reserve that sum, to forward his measures with regard to Britain, and to procure intelligence of the motions of his enemies. The army was satisfied even with this ap-

pearance of money, and the people received the fictitious coin in hopes of being repaid in a more favourable state of affairs. A tax of 20,000 *l.* a month, granted for 13 months by the parliament, furnished government with an appearance of resources; and in the meantime the king endeavoured to support the former revenue. He opened a trade with France to supply the want of commerce with England. But the French, knowing their own importance, and the necessity of the unfortunate monarch's affairs, claimed and obtained advantages in traffic which offended his own subjects.

To add to the distress of James, Ireland was now invaded by 10,000 men under the command of the duke of Schomberg. They appeared on the 12th of August 1689, in 90 transports, on the coast of Donaghadee, in the county of Down. Next day Schomberg landed without opposition his army, horses, and train of artillery. Having marched to Belfast on the 15th, he continued in that place four days to refresh his troops. He invested Carrickfergus, and threw into it 1000 bombs, which laid the houses in ashes. The garrison having expended their powder to the last barrel, marched out with all the honours of war. But Schomberg's soldiers broke the capitulation. They disarmed and stripped the inhabitants, without any regard to sex or quality; even women, stark naked, were publicly whipped between the lines; and all this under pretence of cruelties of the same kind having been committed by the Papists.

Though Schomberg was an experienced general, who had passed a life of 80 years almost continually in the field, he found himself at a loss how to carry on the war in Ireland. He did not consider the dangers that threatened the health of his troops by confining them too long in one place; and he kept them in a low moist camp near Dundalk, almost without firing of any kind; so that the men fell into fevers and fluxes, and died in great numbers. The enemy were not less afflicted with similar disorders. Both camps remained for some time in sight of each other; and at last, the rainy season approaching, both armies quitted their camps at the same time, and retired into winter quarters.

The bad success of the campaign, and the miserable situation of the Protestants in Ireland, at length induced William to attempt their relief in person. Accordingly he left London on the 4th of June 1690, and arrived at Carrickfergus on the 14th of that month. From thence he passed to Lisburn, the head quarters of the duke of Schomberg. He reviewed at Lough-Britland his army, which consisted of 36,000 men, and was composed of English, Dutch, Germans, Danes, and French. Being supplied with every necessary, and in high health and spirits, they seemed absolutely certain of victory. The Irish army, having abandoned Ardee at their approach, fell back to the south of the Boyne. On the bank of that river they were joined by James, who had marched from Dublin at the head of his French auxiliaries. The banks of the Boyne were steep; the south side hilly, and fortified with ditches. The river itself was deep, and it rose very high with the tide. These advantages induced James, contrary to the opinion of his officers, to keep possession of this post. His army was inferior in numbers, discipline, and every thing, to his

Britain.

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Ireland in-
vaded by
William's
army;

317

And by
William in
person.

318

Battle at
the Boyne.

Britain. his enemies: but flight, he thought, would dispirit his troops, and tarnish his own reputation; he therefore resolved to put the fate of Ireland on the issue of a battle. Urged by his friends in England, and encouraged by a projected invasion of that kingdom by France, he had resolved to quit Ireland; and to this he was farther encouraged by the assurance of aid from a powerful fleet that had already entered the narrow seas. But the strength of his situation, and the sudden appearance of the enemy, which made even a retreat dangerous, induced him to defer his purpose.

319
William in
danger.

William was no sooner arrived, than he rode along the river's side, in sight of both armies, to make proper observations on the plan of battle; but in the mean time, being perceived by the enemy, a cannon was privately brought out and planted against him where he was sitting. The shot killed several of his followers, and he himself was wounded in the shoulder. The news of his being slain was instantly propagated thro' the Irish camp, and even sent off to Paris; but William, as soon as his wound was dressed, rode through the camp, and quickly undeceived his army.

320
James de-
feated.

The next day (June 30th) the battle began at six in the morning. James's forces behaved with great resolution, but were at last defeated with the loss of 1500 men. The Protestants lost but about one-third of that number; but among these was their brave general the duke of Schomberg. He was killed by a discharge from his own troops, who, not knowing that he had been accidentally hurried into the midst of the enemy, fired upon the body of men who surrounded him. During the action, James stood on the hill of Dunmore, surrounded with some squadrons of horse; and at intervals was heard to exclaim, when he saw his own troops repulsing those of the enemy, "O spare my English subjects!" While his troops were yet fighting, he quitted his station; and leaving orders to guard the pass at Duleek, made the best of his way to Dublin. He advised the magistrates of that city to make the best terms they could with the victors; and he himself set out for Waterford, where he immediately embarked for France. When he first deserted his troops at the Boyne, O'Regan, an old Irish captain, was heard to say, "That if the English would exchange generals, the conquered army would fight them over again."

321
He flies to
France.

322
War conti-
nued in his
absence.

The victory at the Boyne was by no means decisive, and the friends of James resolved to continue their opposition to William. Sarsfield, a popular and experienced general, put himself at the head of the army that had been routed at the Boyne, and went farther into the country to defend the banks of the river Shannon. James appointed one St Ruth to command over Sarsfield, which gave the Irish universal discontent. On the other hand, general Ginkle, who had been appointed to command the English army in the absence of William, who was gone over to England, advanced towards the Shannon to meet the enemy. The only place where it was fordable was at Athrone, a strong walled town built on both sides of the river, and in the hands of king James's party. The English soon made themselves masters of that part which was on the hither side of the river; but the part on the opposite bank being defended with great vigour, was for a long while thought impregnable. At length it was resolved in a council of war, that a body of forlorn hope should ford

the stream in the face of the enemy; and this desperate enterprise was performed with great resolution; the enemy were driven from their works, and the town surrendered at discretion. St Ruth marched his army to its relief, but he came too late; for he no sooner approached, than his own guns were turned against him: upon which he instantly marched off, and took post at Aughrim, at ten miles distance, where he determined to wait the English army. Ginkle did not decline the combat, though he had only 18,000 men, while the Irish were above 25,000 strong. A desperate engagement ensued; but at last St Ruth being killed, his troops gave way on all sides, and retreated to Limeric, where they determined to make a final stand, after having lost near 5000 of their best men.

Britain.

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St Ruth,
James's ge-
neral, de-
feated and
killed.

Ginkle, wishing to put an end to the war at once, suffered as many of the Irish as chose, to retire to Limeric. In this last retreat the Irish forces made a brave defence. The siege commenced August 25th 1691. Six weeks were spent before the place without any decisive effect. The garrison was well supplied with provisions, and provided with all means of defence. The winter was approaching, and Ginkle had orders to finish the war upon any terms. He therefore offered such conditions as the Irish, had they been victors, could scarce have refused with prudence. He agreed, that all in arms should receive their pardon: that their estates should be restored, their attainders annulled, and their outlawries reversed: that none should be liable for debts incurred through deeds done in the course of hostilities: that all Roman-catholics should enjoy the same toleration with regard to their religion, as in the reign of Charles II.: that the gentry should be permitted to make use of arms: that the inferior sort should be allowed to exercise their callings and professions: that no oaths but that of allegiance should be required of high or low: that should the troops, or any number of them, choose to retire into any foreign service, they should be conveyed to the continent, at the expence of the king. Sarsfield, who had obtained the title of *earl of Lucan* from James after his abdication, was permitted to retain a dignity which the laws could not recognise. The lords justices had arrived from Dublin on the first of October. They signed the articles together with Ginkle; and thus the Irish Papists put a happy period to a war which threatened their party with absolute ruin. In consequence of this treaty, about 14,000 of those who had fought for king James went over to France, having transports provided by government for conveying them thither. When they arrived, James thanked them for their loyalty, and told them that they should still fight for their old master; and that he had obtained an order from the king of France for their being new clothed, and put into quarters of refreshment. In this manner all James's expectations from Ireland were entirely frustrated, and the kingdom submitted quietly to the English government.

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Limeric be-
sieged.

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Favourable
terms al-
lowed them
by Ginkle.

In the beginning of the year 1692, an action of un-
exampled barbarity disgraced the government of Wil-
liam in Scotland. In the preceding August, in con-
sequence of a pacification with the Highlanders, a pro-
clamation of indemnity had been issued to such insur-
gents as should take the oaths to the king and queen,
on or before the last day of December. The chiefs of
the few tribes who had been in arms for James complied
soon after with the proclamation: but Macdonald of
Glenco.

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Massacre at
Glenco.

Britain.

Glenco failed in submitting within the limited time; more, however, from accident than design. In the end of December, he came to colonel Hill, who commanded the garrison in fort William, to take the oaths of allegiance to the government. Hill having furnished Macdonald with a letter to Sir Colin Campbell, sheriff of the county of Argyle, directed him to repair immediately to Inverary, to make his submission in a legal manner before that magistrate. The way to Inverary lay through almost impassable mountains; the season was extremely rigorous, and the whole country covered with a deep snow. So eager, however, was Macdonald to take the oaths, before the limited time should expire, that tho' the road lay within half a mile of his own house, he would not stop to visit his family. After various obstructions, he arrived at Inverary. The time was elapsed, and the sheriff hesitated to receive his submission; but Macdonald prevailed on him by his importunities, and even tears. Sir John Dalrymple, afterwards earl of Stair, attended king William as secretary of state for Scotland. He took advantage of Macdonald's neglecting to take the oaths within the time prescribed, and procured from the king a warrant of military execution against him and his whole tribe. As a mark of his own eagerness, or to save Dalrymple, William signed the warrant, both above and below, with his own hand. The secretary, in letters expressive of a brutal ferocity of mind, urged the officers who commanded in the Highlands to execute their orders with the utmost rigour. Campbell of Glenlyon, a captain in Argyle's regiment, and two subalterns, were ordered with 120 men to repair to Glenco on the first of February. Campbell, being uncle to young Macdonald's wife, was received by the father with all manner of friendship and hospitality. The men were treated in the houses of his tenants with free quarters and kind entertainment. Till the 13th of the month, the troops lived in good humour and familiarity with the people. The officers on the very night of the massacre passed the evening and played at cards in Macdonald's house. In the night, lieutenant Lindsay, with a party of soldiers, called in a friendly manner at his door. He was instantly admitted. Macdonald, as he was rising to receive his guest, was shot dead behind his back with two bullets. His wife had already put on her cloathes; but she was stripped naked by the soldiers, who tore the rings off her fingers with their teeth. The slaughter was become general. To prevent the pity of the soldiers to their hosts, their quarters had been changed the night before. Neither age nor infirmity was spared. Some women, in defending their children, were killed. boys, imploring mercy, were shot by officers, on whose knees they hung. In one place, nine persons, as they sat enjoying themselves at table, were shot dead by the soldiers. At Inveriggen, in Campbell's own quarters, nine men were first bound by the soldiers, and then shot at intervals, one by one. Near 40 persons were massacred by the troops. Several who fled to the mountains perished by famine and the inclemency of the season. Those who escaped owed their lives to a tempestuous night. Lieutenant colonel Hamilton, who had the charge of the execution from Dalrymple, was on his march with 400 men, to guard all the passes from the valley of Glenco; but was obliged to stop by the severity of the weather, which proved the safety

of the unfortunate tribe. He entered the valley next day; laid all the houses in ashes; and carried away all the cattle and spoil, which were divided among the officers and soldiers.

It can scarce be imagined that a massacre attended with such circumstances of treachery and breach of the laws of hospitality, could pass without some animadversion; though the expressions of Cunningham, a writer very partial to the character of king William, seem to account it a fault that it should ever have been inquired into. "Mr James Johnstone, one of the secretaries of state (says he), from motives of revenge, caused the affair of Glenco to be laid before parliament. This being somewhat disingenuously managed, was the occasion of much trouble to many people. The earl of Breadalbin was committed to the castle of Edinburgh: but the lord viscount Stair, who lay under some suspicion on that account, in a very artful speech endeavoured to resolve the whole matter into a misapprehension of dates; which, he alleged, had led both the actor in the slaughter complained of, and those who now accused him, into mistakes. In conclusion he affirmed, that neither the king nor any other person was to be blamed, save only the misled captain, who did not rightly understand the orders that had been given him." The most disgraceful circumstances of the massacre are by the same author concealed; as he only tells us, that "it unhappily fell out, that the whole clan of Glenco, being somewhat too late in making their submission to king William, were put to the sword by the hands and orders of captain Campbell; which gave great offence to the king. It is certain the king had cause of resentment against some of his courtiers on account of this foul action; but he thought fit not to question them for it till he could settle himself more firmly on the throne."

It is not improbable, that partly to efface the remembrance of this massacre, and the sham inquiry above mentioned, the king now caused his commissioner to declare in the Scots parliament (the same that had inquired into the affair of Glenco), "That if the members found it would tend to the advancement of trade that an act should be passed for the encouragement of such as should acquire and establish a plantation in Africa, America, or any other part of the world where plantations might be lawfully acquired, that his majesty was willing to declare he would grant to the subjects of this kingdom, in favour of these plantations, such rights and privileges as he granted, in like cases, to the subjects of his other dominions." Relying on this and other flattering promises, the nobility and gentry of Scotland advanced L.400,000 towards the establishment of a company for carrying on an East and West India trade; and 1200 veterans who had served in king William's wars were sent to effect a settlement on the peninsula of Darien, which lies between the Atlantic and Pacific oceans, and in the narrowest place is not above 60 miles over; and of consequence is equally well adapted for trading with both the Indies.

The new colony were well received by the natives, and matters began to wear a promising aspect, when the king, on the earnest solicitations of the English and Dutch East India companies, resolved to gratify the latter at the expence of his Scottish subjects; and knowing that

the

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Account of
the Darien
expedition.

Britain.

the new colony must want supplies of provisions, he sent orders to the governor of Jamaica and the English settlements in America to issue proclamations, prohibiting, under the severest penalties, all his majesty's subjects from holding any correspondence with the Scottish colony, or assisting it in any shape with arms, ammunition, or provisions: "Thus (says Mr Knox) the king's heart was hardened against these new settlers, whom he abandoned to their fate, though many of them had been covered with wounds in fighting his battles.

"Thus vanished all the hopes of the Scottish nation, which had engaged in this design with incredible alacrity, and with the most sanguine expectations that the misfortunes of their country would, by this new channel of commerce, be completely healed.

"The distresses of the people, upon receiving authentic accounts of the fortune of their colony, scarcely admit of any description. They were not only disappointed in their expectations of wealth and a renewal of their commerce, but hundreds, who had ventured their all, were absolutely ruined by the miscarriage of the design.

"The whole nation seemed to join in the clamour that was raised against their sovereign. They taxed him with double dealing, inhumanity, and base ingratitude, to a people who had lavished their treasure and best blood in support of his government, and in the gratification of his ambition; and had their power been equal to their acrimony, in all probability the island would have been involved in a civil war."

Such is the account of this transaction given by Mr Knox; on the other hand, Mr Cunningham tells us, that "the same parliament (which had inquired into the Glenco affair) also had under their consideration a scheme for settling a trade and planting a colony in America, which proved afterwards an occasion of manifold evils, and was matter of great complaint both to the English and the Spaniards. The Scots, carrying on the settlement of the colony which has been just mentioned with extravagant parade, and noise, and subscriptions, filled not only England but all other countries also, with apprehensions lest Scotland should, in process of time, become the emporium of all the trade of Europe. But they never considered how few would trust their fortunes to the disposal of such a numerous nobility, nor calculated the frauds of their own managers: by which means the whole affair was afterwards ruined. Discords arising on this head between the two kingdoms, old hostilities were recalled to mind; the cattle were driven off from the borders; the customs were defrauded, and other injuries committed; and at last the Spaniards complained of the Scots. Therefore, to prevent the mischiefs which might arise to both kingdoms, the king had nothing so much at heart as to bring about an union upon as fair terms as he could, &c.

The total reduction of Ireland, and the dispersion and extermination of the Highland chieftains who favoured his cause, did not entirely put an end to the hopes of James. His chief expectations next were founded on a conspiracy among his English adherents, and in the succours promised him by the French king. A plot was first formed in Scotland by Sir James Montgomery; a person who, from being an adherent to

William, now turned against him: but as the project was ill contrived, so it was as lightly discovered by the intligator. To this another succeeded, which seemed to threaten more serious consequences, as it was managed by the whig party, who were the most formidable in the state. A number of these joined themselves to the Tories; and both made advances to the adherents of the late king. They assembled together: and the result of their deliberations was, that the restoration of James was to be effected entirely by foreign forces: that he should sail for Scotland, and be there joined by 5000 Swedes; who, because they were of the Protestant religion, would, it was thought, remove a part of the odium which attended an invasion by foreigners: it was concerted that assistance should at the same time be sent from France, and that full liberty of conscience should be proclaimed throughout the kingdom. In order to lose no time, it was resolved to send over to France two trusty persons to consult with the banished monarch; and lord Preston and Mr Ashton were the two persons appointed for this embassy. Both of them, however, were seized when they least expected it, by order of lord Caermarthen. Both were condemned; and Ashton was executed without making any confession; but lord Preston had not the same resolution. Upon an offer of pardon, he discovered a great number of associates; among whom the duke of Ormond, lord Dartmouth, and lord Clarendon, were foremost.

The French at last became sensible of their bad policy in not having better supported the cause of James, and therefore resolved to make a descent upon England in his favour. In pursuance of this scheme, the French king supplied James with an army consisting of a body of French troops, some English and Scots refugees, and the Irish regiments, which had been transported into France from Limerick, and were now become excellent soldiers by long discipline and severe duty. This army was assembled between Cherbourg and La Hogue, and commanded by king James in person. More than 300 transports were provided for landing it on the opposite coast; and Tourville, the French admiral, at the head of 63 ships of the line, was appointed to favour the descent. His orders were, at all events, to attack the enemy, in case they should oppose him; so that every thing promised the banished king a change of fortune.

These preparations on the side of France were soon known at the English court, and every precaution taken for a vigorous opposition. All the secret machinations of the banished king's adherents were discovered to the English ministry by spies; and by these they found that the Tories were more faithful than even the Whigs who had placed king William on the throne. The duke of Marlborough, lord Godolphin, and even the princess Anne herself, were violently suspected of disaffection. Preparations, however, were made with great tranquillity and resolution, to resist the growing storm. Admiral Russel was ordered to put to sea with all possible expedition; and he soon appeared with 99 ships of the line, besides frigates and fire-ships. At the head of this formidable fleet he set sail for the coast of France; and, near La Hogue, he discovered the enemy under Tourville, who prepared to give him battle. The engagement began between the two admirals with

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He is supported by the French;

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Plots in favour of James.

great

Britain.
330
Who are
defeated.

great fury, and the rest of the fleet soon followed their example. The battle lasted for ten hours; but at last victory declared on the side of numbers: the French fled for Conquet road, having lost four ships in the first day's action. The pursuit continued for two days following: three French ships of the line were destroyed the next day; and 18 more, which had taken refuge in the bay of La Hogue, were burnt by Sir George Rooke. In this manner were all the French preparations frustrated; and so decisive was the blow, that from this time France seemed to relinquish all claims to the ocean.

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James offered the
crown of
Poland;

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Which he
refuses.

333
William offered to
own James's
son for his
own successor;

334
Which
James re-
fuses.

335
His death.

This engagement, which happened on the 21st of May 1692, put a final period to the hopes of James. No further attempts were made in his favour, except some plots to assassinate king William, which ended only in the destruction of those who formed them. But it was never thoroughly proved that James countenanced these plots in the least; it rather appears, that in all cases he expressed the utmost abhorrence of such attempts. In 1697, the abbe de Polignac, ambassador from France in Poland, wrote to his master, that thoughts were entertained of the late king of Britain, in the new election which happened on the death of John Sobieski king of Poland; and that James had been already named by some of the diets as his successor. Louis was eager to seize an opportunity of ridding himself with honour of a prince whose pretensions he could no longer support. The friends of James were also sanguine for the project; but he himself refused it. He told them, that "he would ever retain a grateful remembrance of his friends in Poland. That, however, he would not accept of the crown, had it actually been offered; much less would he endeavour to obtain by solicitation any crown which was not actually his due. That his acceptance of any other sceptre would amount to an abdication indeed of that which he deemed his right. That therefore he was resolved to remain in his present forlorn condition, possessing less hopes than ever of being restored, rather than to do the least act of prejudice to his family." The same year, at an interview between king William and Louis XIV. it was proposed that the prince of Wales (James's son) should succeed to the throne of England after the death of William. The king with little hesitation agreed to this request. He even solemnly engaged to procure the repeal of the act of settlement; and to declare, by another, the prince of Wales his successor to the throne. Even this proposal was rejected by James. He told the King of France, that though he could suffer with patience the usurpation of his nephew upon his right, he would never permit his own son to be guilty of the same injustice. He urged, that should the son reign in his father's lifetime, that circumstance would amount to a formal renunciation. That the prince of Wales, by succeeding to the prince of Orange, would yield his sole right, which was that of his father, &c.

From this time James lost every hope of being restored to the throne, and resigned himself entirely to the austerities of religious enthusiasm. His constitution, though vigorous and athletic, had for some time begun to yield to the infirmities of age, and to that melancholy which superstition as well as his uncommon misfortunes had impressed on his mind. In the beginning

of September 1701, when he was, according to his daily custom, at public prayers, he fell suddenly into a lethargy; and though he recovered his senses soon after, he languished for some days, and expired on the 6th of September. The French king, with great humanity, paid him several visits during his sickness; and exhibited every symptom of compassion, affection, and even respect.

Louis, being under a difficulty how to proceed upon the unexpected death of James, called a council to take their advice, whether he should own the prince of Wales as king of Great Britain and Ireland. The king himself had hesitated long in this delicate point. But the dauphin, the duke of Burgundy, and all the princes of the blood, declared, that it was unbecoming the dignity of the crown of France not to own that the titles of the father devolved immediately upon the son. Louis approved of this resolution, and determined to acquaint the dying king with it in person. When he arrived at St Germain's, he acquainted first the queen, and then her son, of his design. He then approached the bed in which James lay almost insensible with his disorder. The king, rousing himself, began to thank his most Christian majesty for all his favours; but Louis interrupted him. "Sir (said he), what I have done is but a small matter; but what I have to say is of the utmost importance." The people then began to retire. "Let no person withdraw (said Louis). I come to acquaint you, Sir, that when God shall please to call your majesty from this world, I shall take your family into my protection, and acknowledge your son, as he then will certainly be, king of Great Britain and Ireland."

Though the defeat of the French fleet at La Hogue had put king William out of all danger from any further attempts from that quarter, he by no means possessed his throne with any kind of tranquillity. The want of a common enemy produced dissensions among the people, and William began to find as much uneasiness from his parliament at home as from an enemy in the field. The uneasiness he felt from the refractory disposition of his subjects was not a little heightened by the death of his queen, who was taken off by the small-pox on the 28th of December 1694. For some time he was under a sincere concern for her loss; but as politics had taken entire possession of his mind, he lost all other concerns in the greatness of his apprehensions for the balance of power and the fluctuating interests of Europe.

His chief motive for accepting the crown was to engage England more deeply in the concerns of Europe. His great object had been to humble the French, and all his politics consisted in forming alliances against them. On the other hand, many of the English had no such animosity against the French; and these, therefore, considered the interest of the nation as sacrificed to foreign connections; and complained that the continental war fell most heavily on them, though they had the least interest in its success. These complaints were heard by William with the most phlegmatic indifference; he employed all his attention only on the balance of power, and the interests of Europe. He became unmindful of the cultivation of internal polity; and, as he formed alliances abroad, increased the influence of party at home. Patriotism began to be ridiculed

Britain.

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Pretender
owned by
Louis to be
the king of
Britain.

337
Death of
queen Ma-

338
National
discontent.

Britain.

diculed as an ideal virtue; and the practice of bribing a majority in parliament became universal. The example of the great was caught up by the vulgar; principle, and even decency, was gradually banished; talents lay uncultivated, and the ignorant and profligate were received into favour.

The king, upon accepting the crown, was resolved to preserve as much of the prerogative as possible; and he sometimes exerted a branch of it which his predecessors had never chosen to make use of, viz. the power of refusing his assent to some bills that had passed both houses. From this and other causes there were perpetual bickerings between him and his parliaments. At last William became fatigued with opposition. He admitted every restraint upon the prerogative in England, upon condition of being properly supplied with the means of humbling France. Provided the parliament supplied him with the means of executing this, he permitted them to rule the internal polity as they pleased. For the prosecution of the French war, the sums granted were indeed incredible. The nation, not contented with furnishing him such sums of money as they were capable of raising by the taxes of the year, mortgaged those taxes, and involved themselves in debts which they have never since been able to discharge.

The war with France continued during the greatest part of this king's reign; but at length the treaty of Ryswick, in 1697, put an end to those contentions in which England had engaged without policy, and came off at last without advantage. In the general pacification, her interests seemed entirely deserted; and for all the treasures she had sent to the continent, and all the blood which had been shed there, the only equivalent received was an acknowledgement of William's title from the king of France.

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William
obliged to
disband his
forces.

The king, being now freed from a foreign war, set himself to strengthen his authority at home. As he could not bear the thoughts of being a king without military command, he conceived hopes of keeping up, in the time of a profound peace, those forces which had been granted during the time of danger. The commons, however, to his great mortification, passed a vote, that all the forces in the English pay, exceeding 7000 men, should be forthwith disbanded; and that those retained should be natural-born subjects of England. With this vote the king was exceedingly displeased. His indignation, indeed, was kindled to such a degree, that he actually conceived a design of abandoning the government. From this, however, his ministers diverted him, and persuaded him to consent to the passing of the bill.

These altercations continued during the remainder of this reign. William considered the commons as a body of men desirous of power for themselves, and consequently bent upon obstructing all his projects to secure the liberties of Europe. He seemed but little attached to any particular party in the house, all of whom he found at times deserted or opposed him. He therefore veered to whigs and tories indiscriminately, as interest or the immediate exigence demanded. He considered England as a place of labour, anxiety, and altercation. If he had any time for amusement or relaxation, he retired to Loo in Holland, where, among a few friends, he gave a loose to those coarse festivities which he alone was capable of relishing. Here he plan-

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ned the different succession of the princes of Europe, and laboured to undermine the schemes and the power of Louis his rival in politics and fame.

But however feeble William's desire of other amusements might be, he could scarce live without being at variance with France. Peace had scarce been made with that nation, when he began to think of resources for carrying on a new war, and for inflaming his English subjects in the confederacy against that nation. Several arts were used for inducing the people to second his aims; and the whole nation seemed at last to join in desiring a French war. He had been in Holland concerting with his allies operations for a new campaign. He had engaged in a negociation with the prince of Hesse; who assured him, that if he would besiege and take Cadiz, the admiral of Castile and several other grandees of Spain would declare for the house of Austria. The elector of Hanover had resolved to concur in the same measures; the king of the Romans, and prince Louis of Baden, undertook to invest Laudan, while the emperor promised to send a powerful reinforcement into Italy: but death put a period to his projects and his ambition.

William was naturally of a very feeble constitution; and it was by this time almost quite exhausted by a series of continual disquietude and action. He had endeavoured to repair his constitution, or at least to conceal its decays, by exercise and riding. On the 21st of February 1702, in riding to Hampton-court from Kensington, his horse fell under him; and he was thrown with such violence, that his collar-bone was fractured. His attendants conveyed him to the palace at Hampton-court, where the fracture was reduced; and in the evening he returned to Kensington in his coach. The jolting of the carriage disunited the fracture; and the bones were again replaced by Bidloo his physician. This in a robust constitution would have been a trifling misfortune; but to him it was fatal. For some time he appeared in a fair way of recovery; but falling asleep on his couch, he was seized with a shivering, which terminated in a fever and diarrhoea, that soon became dangerous and desperate. Perceiving his end approaching, the objects of his former care lay next his heart; and the fate of Europe seemed to remove the sensations he might be supposed to feel for his own. The earl of Albemarle arriving from Holland, he conferred with him in private on the posture of affairs abroad. Two days after, having received the sacrament from archbishop Tennison, he expired on Sunday March 8th; having lived 52 years, and reigned 13.—He was in his person of a middle stature, a thin body, and a delicate constitution. He had an aquiline nose, sparkling eyes, a large forehead, and a grave solemn aspect. He left behind him the character of a great politician, though he had never been popular; and of a formidable general, though he had been seldom victorious. His deportment was grave, phlegmatic, and sullen; nor did he ever show any fire but in the day of battle.

Cunningham says, that "at the very last moment, when his mind was otherwise oppressed, he retained a just sense of the redemption of mankind, and the remembrance of his good subjects. Thus he lay so quietly and composed, with his eyes fixed upon heaven, when his speech failed him, that no man could die either better prepared, or with greater constancy and piety

Britain.

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He engages
Britain in a
confederacy
against
France.

341

His death.

Britain.

piety, than this prince; of whose just praises no tongue shall be silent, and no time unmindful. And if any king be ambitious of regulating his councils and actions by the bright examples of the most famous great men, he may form to himself the idea of a great prince and a grand empire, not only from the king's life, but from the public records of the English and Dutch nations."

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Accession
of queen
Anne.

William was succeeded by the princess Anne, who had married George prince of Denmark. She ascended the throne in the 38th year of her age, to the general satisfaction of all parties. William had died at the eve of a war with France: and the present queen, who generally took the advice of her ministry on every important occasion, was now urged by opposite councils; a part of her ministry being inclined to war and another to peace. At the head of those who opposed a war with France was the earl of Rochester, lord lieutenant of Ireland, first cousin to the queen, and the chief of the tory faction. At the head of the opposite party was the earl afterwards duke of Marlborough, and since so much renowned for his victories over the French. After giving the reasons for both their opinions, that of Marlborough preponderated: the queen resolved to declare war; and communicating her intentions to the house of commons, by whom it was approved, war was proclaimed accordingly. In this declaration of war, Louis was taxed with having taken possession of a great part of the Spanish dominions; with designing to invade the liberties of Europe, to obstruct the freedom of navigation and commerce; and with having offered an unpardonable insult to the queen and her throne, by acknowledging the title of the pretender: he was accused of attempting to unite the crown of Spain to his own dominions, by placing his grandson upon the throne of that kingdom, and thus of endeavouring to destroy the equality of power that subsisted among the states of Europe. This declaration of war on the part of England was seconded by similar declarations by the Dutch and Germans, all on the same day.

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War decla-
red against
France.

Louis XIV. whose power had been greatly circumscribed by William, expected on the death of the latter to enter on a field open for new conquests and fame. At the news of the English monarch's death, therefore, he could not suppress his rapture; the people of Paris, and indeed through the whole kingdom, testified their joy in the most public manner. At seeing, therefore, such a combination against him, the French monarch was filled with indignation; but his resentment fell chiefly on the Dutch. He declared with great emotion, that as for those gentlemen pedlars the Dutch, they should one day repent their insolence and presumption in declaring war against him whose power they had formerly felt and dreaded. By these threats, however, the affairs of the allies were no way influenced. Marlborough was appointed general of the British forces, and by the Dutch he was chosen generalissimo of the allied army; and indeed his after conduct showed, that no person could possibly have been chosen with greater propriety. He had learned the first rudiments of war under the famous marshal Turenne, having been a volunteer in his army; and by that general his future greatness was prognosticated.

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Duke of
Marlbo-
rough ap-
pointed ge-
neral.

The first attempt that Marlborough made to deviate from the general practices of the army was to advance the subaltern officers, whose merits had been hitherto neglected. Regardless of seniority, wherever he found abilities, he was sure to promote them; and thus he had all the upper ranks of commanders rather remarkable for their skill and talents than for their age and experience. In his first campaign, in the beginning of July 1702, he repaired to the camp at Nimeguen, where he found himself at the head of 60,000 men well provided with all necessaries, and long disciplined by the best officers of the age. He was opposed on the part of France by the duke of Burgundy, a youth of very little experience in the art of war; but the real acting general was the marshal Boufflers, an officer of courage and activity. But wherever Marlborough advanced, the French were obliged to retire before him, leaving all Spanish Guelderland at his discretion. The duke of Burgundy finding himself obliged to retreat before the allied army, rather than expose himself longer to such a mortifying indignity, returned to Versailles, leaving Boufflers to command alone. Boufflers retired to Brabant: and Marlborough ended the campaign by taking the city of Liege; in which was found an immense sum of money and a vast number of prisoners.

Britain.

345
His success
in his first
campaign.

This good fortune seemed to console the nation for some unsuccessful expeditions at sea. Sir John Munden had permitted a French squadron of 14 ships to escape him by taking shelter in the harbour of Corunna; for which he was dismissed the service by prince George. An attempt was made upon Cadiz by sea and land, Sir George Rooke commanding the navy, and the duke of Ormond the land forces; but this also miscarried. At Vigo, however, the British arms were attended with better success. The duke of Ormond landed with 2500 men at the distance of six miles from the city, while the fleet forcing their way into the harbour, the French fleet that had taken refuge there were burned by the enemy to prevent their falling into the hands of the English. Eight ships were thus burned and run ashore; but ten ships of war were taken, together with eleven galleons, and above a million of money in silver. In the West Indies, admiral Bembow had been stationed with ten ships to distress the enemy's trade. Being informed that Du Casse the French admiral was in those seas with a force equal to his own, he resolved to attack him; and soon after discovered the enemy's squadron near St Martha steering along the shore. He quickly gave orders to his captains, formed the line of battle, and the engagement began. He found, however, that the rest of the fleet had taken some disgust at his conduct; and they permitted him to sustain, almost alone, the whole fire of the enemy. Nevertheless, the engagement continued till night, and he determined to renew it next morning. But he had the mortification to perceive, that all the rest of his ships had fallen back except one, who joined him in urging the pursuit of the enemy. Four days this intrepid seamen, assisted by only one ship, pursued and engaged the enemy, while his cowardly officers remained at a distance behind. His last day's battle was more furious than any of the former: alone, and unsupported by any of the rest, he engaged the whole French squadron; when his leg was shattered by a cannon-ball, and he himself died soon

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Losses at
sea.

347
Bravery and
death of ad-
miral Bem-
bow.

³⁴⁸ **Continental army increased.** Britain. after of his wounds. Two of his cowardly associates were shot on their arrival in England; one died on his passage thither; the rest were disgraced.

The next parliament, which was convened by the queen, were highly pleased with the success of the British arms on the continent. The house of commons was composed chiefly of Tories, who voted 40,000 seamen, and the like number of land-forces, to act in conjunction with those of the allies. Soon after, the queen informed her parliament, that she was pressed by the allies to augment her forces; and upon this it was resolved that 10,000 more men should be added to the continental army, but on condition that the Dutch should immediately break off all commerce with France and Spain; a condition which was very readily complied with.

³⁴⁹ **Success of Marlborough.**

In the beginning of April 1703, the duke of Marlborough crossed the sea, and, assembling the allied army, opened the campaign with the siege of Bonn, the residence of the elector of Cologne. This held out but a short time. He next retook Huy; the garrison of which, after a vigorous defence, surrendered prisoners of war. Limburgh was next besieged, and surrendered in two days; and thus the campaign concluded, the allies having secured the country of Liege and the electorate of Cologne from the designs of the enemy.

In the campaign of 1704, the duke of Marlborough informed the Dutch that it was his intention to march to the relief of the empire, which had been for some time oppressed by the French forces; and the states gave him full powers to march as he thought proper, with assurances of their assistance in all his endeavours. The French king, finding Boufflers no longer capable of opposing Marlborough, appointed the marshal de Villeroy to command in his place. But Marlborough, who, like Hannibal of old, was remarkable for studying the disposition of his antagonists, having no great fears from Villeroy, immediately flew to the assistance of the emperor. Taking with him about 13,000 British troops, he advanced by hasty marches to the banks of the Danube; he defeated a body of French and Bavarians stationed at Donavert to oppose him; then passed the river, and laid under contribution the dukedom of Bavaria which had sided with the enemy. Villeroy, who at first attempted to follow his motions, seemed all at once to have lost sight of the enemy; nor was he apprised of his route till informed of his successes. But, in the mean time, marshal Talard prepared by another route to obstruct Marlborough's retreat with an army of 30,000 men. He was soon after joined by the duke of Bavaria's forces; so that the French army in that part of the continent amounted to 60,000 veterans, commanded by the two best reputed generals then in France.

³⁵⁰ **French defeated at Blenheim.**

* See *Blenheim*.

To oppose these powerful generals, the duke of Marlborough was joined by a body of 30,000 men under the celebrated prince Eugene. The allied army, with this reinforcement, amounted to about 52,000. After various marches and countermarches, the two armies met at Blenheim*. A terrible engagement ensued, in which the French were entirely defeated, and a country of 100 leagues extent fell into the hands of the conquerors. Soon after finishing the campaign, the duke repaired to Berlin, where he procured a reinforcement of 8000 Prussians to serve under prince Eugene in Italy.

Thence he proceeded to negotiate for succours at the court of Hanover; and soon after returned to England, where he was received with every possible demonstration of joy.

The arms of Britain, in the mean time, were not less fortunate by sea than by land. The town of Gibraltar was taken by the prince of Hesse and Sir George Rooke: but so little was the value of the conquest at that time understood, that it was for some time in debate whether it was a capture worth thanking the admiral for; and at last it was considered as unworthy of public gratitude. Soon after, the British fleet, to the number of 53 ships of the line, came up with that of France, consisting of 52 men of war, commanded by the count de Thoulouse, off the coast of Malaga. This was the last great naval engagement in which the French ventured to face the British on equal terms. The battle began at ten in the forenoon, and continued with great fury for six hours; when the van of the French began to give way. The British admiral for two days attempted to renew the engagement; but this was cautiously declined by the French, who at last disappeared totally. Both sides claimed the victory, but the consequence decided it in favour of the British.

In the mean time, the Spaniards, alarmed at the taking of Gibraltar, sent the marquis of Villadurias with a large army to retake it. France also sent a fleet of 13 ships of the line: but part of them were dispersed by a tempest, and part taken by the British. Nor was the land army more successful. The siege continued for four months; during which time the prince of Hesse, who commanded the town for the English, gave many proofs of valour. At length, the Spaniards having attempted to scale the rock in vain, finding no hopes of taking the place, were contented to draw off their men and abandon the enterprise.

While the British were thus victorious by land and sea, a new scene of contention was opened on the side of Spain. Philip V. grandson of Louis XIV. had been placed on the throne of that kingdom, and received with the joyful concurrence of the greatest part of his subjects. He had also been nominated successor to the crown by the late king of Spain's will. But in a former treaty among the powers of Europe, Charles, son of the emperor of Germany, was appointed heir to that crown; and this treaty had been guarantee'd by France herself, though she now resolved to reverse that consent in favour of a descendant of the house of Bourbon. Charles was still farther led on to put in for the crown of Spain, by the invitation of the Catalonians, who declared in his favour; and with the assistance of the British and Portuguese, promised to arm in his cause. Upon his way to his newly assumed dominion, he landed in England; where he was received on shore by the dukes of Somerset and Marlborough, who conducted him to Windsor. He was kindly received by the queen; and furnished with 200 transports, 30 ships of war, and 9000 men, for the conquest of that extensive empire. The earl of Peterborough, a man of romantic bravery, offered to conduct them; and his single service was reckoned equivalent to armies.

The first attempt of this general was on the city of Barcelona, at that time defended by a garrison of 5000 men. The fort Monjuc, situated on a hill that commanded the city, was attacked; the outworks were taken.

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ken by storm, and the powder-magazine was blown up by a shell; upon which the fort immediately surrendered, and the city capitulated in a short time after. The conquest of all Valencia succeeded the taking of Barcelona. Charles became master of Arragon, Carthage, Grenada, and Madrid. The British general entered the capital in triumph, and there proclaimed Charles king of Spain without opposition.

357
French de-
feated at
Ramillies.

* See Ra-
millies.

358
Louis sues
in vain for
peace.

359
Revolution
in the coun-
cils of queen
Anne.

To these successes, however, very little regard was paid in Britain. The victories of the duke of Marlborough alone engrossed their attention. In 1706, he opened the campaign with an army of 80,000 men. He was met by the French under Villeroy near the village of Ramillies*. An engagement ensued, in which the duke gained a victory almost as complete as that of Blenheim had been; and the whole country of Brabant was the reward of the victors. The French troops were now dispirited; the city of Paris was in confusion; Louis, who had long been flattered with conquest, was now humbled to such a degree as almost to excite the compassion of his enemies. He intreated for peace, but in vain; the allies carried all before them; and his very capital began to dread the approach of the conquerors. But what neither his armies nor his politics could effect, was brought about by a party in England. The dissension between the whigs and tories saved France, that now seemed tottering on the brink of ruin.

The councils of the queen had hitherto been governed by a whig ministry; for though the duke of Marlborough started in the interest of the opposite party, he soon joined the whigs, as he found them most sincere in the design of humbling France. The people, however, were now in fact beginning to change, and a general spirit of toryism to take place. The queen's personal virtues, her successes, her deference for the clergy, and their great veneration for her, began to have a prevailing influence over the whole nation. People of every rank were not ashamed to defend the most servile tenets, when they tended to flatter or increase the power of the sovereign. They argued in favour of strict hereditary succession, divine right, and non-resistance to the regal power. The tories, though joining in vigorous measures against France, were never ardently their enemies: they rather secretly hated the Dutch, as of principles very opposite to their own; and longed for an opportunity of withdrawing from their friendship. They began to meditate schemes of opposition to the duke of Marlborough. Him they considered as a self-interested man, who sacrificed the real advantages of the nation, in protracting a ruinous war for his own private emolument and glory. They saw their country oppressed with an increasing load of taxes, which by a continuance of the war must inevitably become an intolerable burden. Their discontents began to spread, and the tories wanted only a few determined leaders to assist them in removing the present ministry.

30
English de-
feated at Al-
manza.

† See Al-
manza.

In the mean time, a succession of losses began to dissipate the conquering frenzy that had seized the nation in general, and to incline them to wish for peace. The earl of Galway, who commanded the army in Spain, was utterly defeated at Almanza† by the duke of Berwick; and in consequence of this victory, all Spain, except the province of Catalonia, returned to their duty to Philip their lawful sovereign. An attempt was made upon Toulon, by the duke of Savoy and

prince Eugene by land, and an English fleet by sea; but to no purpose. The fleet under Sir Cloudesly Shovel, having set sail for England, was driven by a violent storm on the rocks of Scilly. His own ship was lost, and every person on board perished. Three more ships met with the same fate; while three or four others were saved with the utmost difficulty. In Germany, marshal Villars the French general carried all before him, and was upon the point of restoring the elector of Bavaria. The only hopes of the people lay in the activity and conduct of the duke of Marlborough, who opened the campaign of 1707, about the middle of May; but even here they were disappointed. The duke declined an engagement; and after several marchings and countermarchings, both armies retired into winter quarters about the end of October. The French made vigorous preparations for the next campaign; and the duke returned to England to meet with a reception he did not at all expect, and which, as far as appears, he did not deserve.

The most remarkable transaction, however, of this year, and indeed of this whole reign, was the union between the two kingdoms of Scotland and England. Though governed by one sovereign since the time of James I. of England, yet each nation continued to be ruled by its respective parliament; and often professed to pursue opposite interests to those of its neighbour. The union had often been unsuccessfully attempted before, and had indeed been the cause of the bloody wars in the time of Edward I. and III. of England. In all the former proposals on that head, both nations were supposed to remain free and independent; each kingdom having its own parliament, and subject only to such taxes and other commercial regulations as those parliaments should judge expedient for the benefit of their respective states. After the destruction of the Darien colony, in the manner already related, king William had endeavoured to allay the national ferment by resuming the affair of an union with as much assiduity as his warlike disposition would allow. The terms proposed were the same with those formerly held out, viz. a federal union, somewhat like that of the states of Holland. With this view the Scots were prevailed on to send 20 commissioners to London; who, with 23 on the part of England, met at Whitehall in the month of October 1702. Here they were honoured with a visit from the queen, in order to enliven their proceedings and stimulate them to a more speedy dispatch of business: but the treaty was entirely broken off at this time by the Scottish commissioners insisting, that the rights and privileges of their countrymen trading to Africa and the Indies should be preserved and maintained. It was, however, resumed in the year 1706, when the commissioners again met on the 16th of April, in the council-chamber of Whitehall. The Scottish commissioners still proposed a federal union; but the English were determined on an incorporation, which should not afterwards be dissolved by a Scottish parliament. Nothing but this, they said, could settle a perfect and lasting friendship betwixt the two nations. The commissioners from Scotland, however, still continued to resist that article which subjected their country to the same customs, excises, and regulations of trade as England; but the queen being persuaded to pay two visits in person to the commissioners,

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361

Shipwreck
of Sir Cloud-
sley Shovel.

362

Union be-
tween Scot-
land and
England.

Britain. missioners, exerted herself so vigorously, that a majority was at last gained over; and all the rest yielded, though with reluctance, excepting Lockhart of Carnwath, who could not by any means be persuaded either to sign or seal the treaty.

363

The articles
most vio-
lently oppo-
sed in Scot-
land.

The articles being fully prepared on the 22d of July, they were presented next day to her majesty by the lord-keeper, in the name of the English commissioners; at the same time that a sealed copy of the instrument was likewise delivered by the lord chancellor of Scotland. They were most graciously received; and the same day the queen dictated an order of council, threatening with prosecution such as should be concerned in any discourse or libel, or in laying wagers with regard to the union. Notwithstanding all this harmony, however, the treaty was received with the utmost disapprobation in Scotland. The terms had been carefully concealed, so that nothing transpired till the whole was at once laid before parliament. The ferment was then so general, that all ranks of people, however divided in other respects, united against this detested treaty. The nobility and gentry were exasperated at the annihilation of parliament, and the consequent loss of their influence and credit. The body of the people cried out, that the independence of the nation was sacrificed to treachery and corruption. They insisted that the obligations laid on their members to stay so long at London, in their attendance on the British parliament, would drain the country of its money, impoverish the members themselves, and subject them to the temptation of being corrupted. Nor was the commercial part of the people better satisfied. The dissolution of the India company, the taxes laid on the necessaries of life, the vast number of duties, customs, and restrictions, laid upon trade, were all of them matter of complaint. Before this time the trade of Scotland had been open to the Levant, the Baltic, France, Spain, Portugal, Holland, and the Dutch plantations; and it seemed difficult to conceive how the commerce of the country could be advanced by laying restrictions upon it to these places, especially as the compensation allowed, viz. the privilege of trading to the English plantations in America, must have been a very trifling advantage, when the amount of the whole exports to these places did not near equal the expence of defending them. The most violent disputes took place in the parliament. The lord Belhaven made a most pathetic speech, enumerating the miseries that would attend this treaty; which drew tears from the audience, and to this day is reckoned prophetic by many of the Scottish nation. Almost every article of the treaty was the subject of a protest; addresses against it were presented to parliament by the convention of royal boroughs, the commissioners of the general assembly, the company trading to Africa and the Indies, as well as from shires, stewartries, boroughs, towns, and parishes, without distinction of whig, tory, presbyterian, or episcopal.

Nor was the resentment of the common people without doors less than that of the members within. A coalition was formed betwixt the presbyterians and cavaliers: and to such a height did the resentment of the people arrive, that they chose officers, formed themselves into regiments, provided horses and ammunition, burnt the articles of union, justified their conduct by a

public declaration, and resolved to take the route to **Britain.** Edinburgh and dissolve the parliament.

In the mean time, the privy council issued a proclamation against riots, commanding all persons to retire from the streets whenever the drum should beat; ordering the guards to fire on those who should disobey this command, and indemnifying them from all prosecution for maiming or slaying the lieges. Even these precautions were insufficient. The duke of Queensberry, the chief promoter of the union, though guarded by double lines of horse and foot, was obliged to pass through the streets at full gallop, amidst the curses and imprecations of the people, who pelted his guards, and even wounded some of his friends who attended him in the coach. In opposition to all this fury, the duke of Queensberry and others attached to the union magnified the advantages that would accrue to the kingdom from the union; they took off the resentment of the clergy, by promoting an act to be inserted in the treaty, by which the presbyterian discipline was to be the only government of the church of Scotland, unalterable in all succeeding times, and a fundamental article of the union. Emissaries were employed to disunite the Cameronians from the Cavaliers, by demonstrating the absurdity, sinfulness, and danger, of such a proceeding. The India company was flattered with the prospect of being indemnified for the losses they had sustained, and individuals by sharing an equivalent. Their last manœuvre was to bring over a party in the Scots parliament, nicknamed the *Squadron Volante*, from their fluctuating between ministry and opposition, without attaching themselves to any party till the critical moment, which was either to cement both kingdoms by a firm union, or involve them in the calamities of war. By this unexpected stroke, the ministry obtained a decisive victory, and all opposition was vain. The articles of treaty were ratified by parliament, with some trifling variations, on the 25th of March 1707; when the duke of Queensberry finally dissolved that ancient assembly, and Scotland ceased to be a separate independent kingdom.

On the conclusion of the treaty, the queen informed both houses of the English parliament, that the treaty of union, with some additions and alterations, was ratified by an act of the parliament of Scotland: that she had ordered it to be laid before them, and hoped it would meet their approbation. She observed, that they had now an opportunity of putting the last hand to a happy union of the two kingdoms: and that she should look upon it as a particular happiness if this great work, so often attempted before without success, could be brought to perfection in her reign. Objections, however, were started by the tory party; but they were at that time too weak to be heard with any attention. Sir John Parkington compared the new treaty to the marriage of a woman without her consent. It was an union carried on by corruption and bribery within doors, and by force and violence without. The promoters of it had basely betrayed their trust, by giving up their independent constitution: and he would leave it to the judgment of the house, whether or not men of such principles were fit to be admitted into their house of representatives. Lord Haverham, in the upper-house, said, the question was, Whether two nations, independent in their sovereign-

ties.

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ties, that had their distinct laws and interests, different forms of worship, church-government and order, should be united into one kingdom? He supposed it an union made up of so many incongruous ingredients, that should it ever take effect, it would require a standing power and force to keep them from falling asunder, and breaking in pieces every moment. Above an hundred Scottish peers, and as many commoners, he said, were excluded from sitting and voting in parliament, though they had as much right to sit there as any English peer had to sit and vote in the parliament of England. The union, he said, was contrary to the sense of the Scottish nation; the murmurs of the people had been so loud as to fill the whole kingdom, and had reached even the doors of parliament. That the government had issued a proclamation, pardoning all slaughter, bloodshed, and maiming, committed upon those who should be found in tumults; and from all these circumstances he concluded, that the people of Scotland were averse to an incorporating union, which, he supposed, would be a most dangerous expedient to both nations. All these arguments, however, were answered by those of the opposite party with such success, that the union was unalterably completed on the first of May 1707; and the island took the name of "The United Kingdom of Great Britain." The queen expressed the highest satisfaction when it received the royal assent, and said, "She did not doubt but it would be remembered and spoke of hereafter, to the honour of those who had been instrumental in bringing it to such an happy conclusion. She desired that her subjects of both kingdoms should from henceforward behave with all possible respect and kindness towards one another; that so it might appear to all the world they had hearts disposed to become one people." The first of May was appointed a day of public thanksgiving; and congratulatory addresses were sent up from all parts of England, excepting the university of Oxford. The Scots, however, were totally silent on the occasion.

364

The union
at first dis-
advantage-
ous to Scot-
land.

In this treaty, it must be observed, that the commissioners on the part of England were not only able statesmen, but, for the most part, well skilled in trade, which gave them an evident advantage over those of Scotland, who consisted of lords and gentlemen who had no commercial knowledge. Hence they were over-matched by the former in the great objects which were to give the turn to national prosperity; though they were very careful to preserve all their heritable offices, superiorities, jurisdictions, and other privileges and trappings of the feudal aristocracy. Had the English commissioners made a liberal use of the advantages afforded them at this time, it would have been in their power greatly to have enriched themselves as well as the inhabitants of Scotland; "but instead of this (says Mr Knox), in negotiating with a ruined kingdom, they were influenced by the then narrow, short-sighted principle of commercial monopoly; and the consequences were such as might, with a small degree of reflection, have been foreseen. Instead of a solid compact, affording, upon the whole, reciprocal advantages, and which it would have been the inclination as well as interest of both nations to preserve inviolate, the concessions on the part of Scotland, and the restrictions on their trade, were so quickly and severely felt, that about the

sixth year after the ratification of the treaty, the sixteen peers who first represented Scotland in the upper-house, though most of them had been the supporters of administration in promoting the union, unanimously moved for its dissolution. The motion was followed by a violent debate, in which, however, the Scottish peers were at last over-ruled, and thenceforth the nation submitted reluctantly to its fate. The metropolis, having no manufacturers, now beheld itself deprived of its only support by the translation of the parliament to London. The trading towns pined under the duties and restrictions on their commerce; the whole kingdom, after so many fatal disasters, seemed completely ruined beyond recovery, and all degrees of men sunk under the weight of these complicated misfortunes. The first fruits of the treaty in Scotland was a board of customs and another of excise, the appointment of commissioners, collectors, &c. with other necessary officers, who were immediately distributed over the several seaports and districts of the nation. In many parts they were roughly used, particularly the excise officers; and in the Orkneys, the officers were so frightened by the country people, that for some time the business was obliged to be postponed."

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In 1708, there was a warm debate in the grand committee of the house of lords, occasioned by a bill passed by the commons for rendering the union of the two kingdoms more entire and complete, whereby it was enacted, that, "from the first of May 1708, there should be but one privy council in the kingdom of Britain.—Of this affair Mr Cunningham gives a particular account, and informs us that he himself had a hand in the affair, and that he had "from his youth borne a just hate to the privy council of Scotland." The arguments for the dissolution were its enormous stretches of power and acts of cruelty; that it could now be of no other use in Scotland than that the court might thereby govern every thing at pleasure, and procure such members of parliament as they thought proper; against which both Scots and English ought now carefully to guard themselves. On the other hand, it was argued, that the abuse of the power complained of was no argument for the entire dissolution of the council, though it was for a restriction and limitation of it; that it was necessary that a privy council should remain in Scotland, out of regard to the ancient customs of the country, and to restrain the rage of the people, which was then ready to break out beyond all bounds. The dissolution, however, was carried by 50 against 40; after which the nation being deprived of this last fragment of their ancient government, the opposers of the union raised the animosities of the people to a dangerous height; but the ferment abated after an ineffectual attempt in favour of the pretender.

365
Dissolution
of the Scots
privy coun-
cil.

We must now return to the duke of Marlborough, who had gone over to Flanders, where he seemed resolved to push his good fortune. Peace had been offered more than once; treaties entered upon, and as often frustrated. After the battle of Ramillies, the king of France had employed the elector of Bavaria to write letters in his name to the duke of Marlborough, containing proposals for opening a congress. He offered to give up either Spain and its dominions, or the kingdoms of Naples and Sicily, to Charles of Austria, and to give a barrier to the Dutch in the Netherlands. But these terms

366
French de-
feated at
Oudenarde.

were

Britain.

* See Oudenarde.

were rejected. The two armies once more met in numbers nearly equal at * Oudenarde (A). An engagement ensued, in which the French were defeated, and Lille (B) the strongest town in Flanders, Gent, Bruges, and all the other towns in that country, soon after fell into the hands of the victors. The campaign ended with fixing a barrier to the Dutch Provinces, and it now only remained to force a way into the provinces of the enemy.

The French king being now in a manner reduced to despair, again sued for peace; but the demands of the allies were so high, that he was obliged to reject them and prepare for another campaign. This was in the year 1709. The first attempt of the allies was on the city of Tournay, garrisoned by 12,000 men, and exceedingly strong both by nature and art. After a terrible siege of 21 days, the town capitulated; and a month afterwards the citadel, which was still stronger than the town. Next followed the bloody battle of Malplaquet†; where the allied army, consisting of 110,000 men, attacked the French consisting of 120,000, strongly posted and fortified in such a manner that they seemed quite inaccessible. Nothing, however, was able to stand before the allied army; they drove the French from their fortifications: but their victory cost them dear; 20,000 of their best troops lay dead on the field of battle (C). The consequence of this victory was the surrender of the city of Mons, which ended the campaign.

† See Malplaquet.

367 And at Malplaquet.

368 Last campaign of the duke of Marlborough.

369 His excellent conduct.

The last campaign of the duke of Marlborough, which happened in the year 1711, is said to have excelled all his former exploits. He was opposed by the marshal Villars, the same who had commanded the French in the battle of Malplaquet. He contrived his measures so, that, by marching and countermarching, he induced the enemy to quit a strong line of entrenchments without striking a blow, which he came afterwards and took possession of. This enterprise was followed by the taking of Bouchain, which was the last military achievement of this great general. By a continuance of conduct and success almost unparalleled, he had gained to the allies a prodigious tract of country. From the beginning of the war, which had now continued nine years, he had perpetually advanced, and never retreated before his enemies, nor lost an advantage he had obtained over them. He most frequently gained the enemy's posts without fighting; but where

he was obliged to attack, no fortifications were able to resist him. He had never besieged a city which he did not take, nor engaged in a battle in which he did not come off victorious. Thus the allies had reduced under their command Spanish Guelderland, Limbourg, Brabant, Flanders, and Hainault; they were masters of the Scarpe, the capture of Bouchain had opened for them a way into the heart of France, and another campaign might have made them masters of Paris: but on the duke's return from this campaign, he was accused of having taken a bribe of 6000 l. a-year from a Jew who had contracted to supply the army with bread; and the queen thought proper to dismiss him from all his employments.

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370 He is dismissed from all his employments.

On the removal of this great general, the command of the British forces was given to the duke of Ormond. The transactions which followed, as represented by Mr Cunningham, are by no means favourable to the character of the British nation. He represents the people at large as blinded by an headstrong and furious clergy, who wished to revive the absurdities of the Romish religion, and to unite the English and Gallican churches; the general of the army acting a most insidious part, by giving the enemy intelligence of the designs of the allies before he declared that he was not to act in concert with them; and the queen herself as commanding him to act such a shameful part, nay as acting in a similar manner herself. Prince Eugene complained much of the inactivity of the English general, though he seemed to be unacquainted with his treachery; while the whole army loaded him with execrations, calling him "a stupid tool, and a general of straw." All this, however, was in vain; the duke continued to prefer the commands of his sovereign to every other consideration.

The disgrace of the duke of Marlborough had been owing to the prevalence of the tory party, who had now got the whig ministry turned out; the consequence of this was, that in spite of all the remonstrances, memorials, &c. of the allies, the British army in Flanders was ordered not to act offensively. Hence the operations languished, a considerable body of the allies was cut off at Denain, and the French retook some towns. A piece was at last concluded in 1713 between France and Britain. In this treaty it was stipulated, that Philip, now acknowledged king of Spain, should renounce all right

371 Peace with France.

to.

(A) In this engagement the electoral prince of Hanover, afterwards George II. of Britain, greatly distinguished himself, and gained the whole glory of the first attack. In the engagement his horse was killed under him, and colonel Luschki close by his side. "On that day (says Cunningham) this excellent young prince discovered such courage as no man living ought to forget, and as all posterity will never surpass."

(B) At the siege of Lille, Cunningham relates the following anecdote of the magnanimity of a common soldier. "This man had the good fortune to take prisoner major-general Colbert, brother to the marquis de Torey. The prisoner, greatly taken with the clemency, humanity, and good behaviour of the soldier, offered him 200 louis d'ors, and a captain's post for life, if he would give him his liberty. The soldier, however, resisted the temptation, alleging the dishonour that would attend such conduct; and asking him at the same time, how, when raised to the rank of a captain, he could look his general in the face for whom he had fought for so many years?—This instance of fidelity weighed so much with prince Eugene and the duke of Marlborough, that the former made him a present, and the latter gave him a captain's commission."

(C) Cunningham differs prodigiously from this account. His computation being no more than 6000 killed and 9000 wounded on the part of the allies, and 7000 killed and 10,000 wounded on the part of the French.

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to the crown of France, the union of two such powerful kingdoms being thought dangerous to the liberties of Europe. It was agreed, that the duke of Berry, Philip's brother, and after him in succession, should also renounce his right to the crown of Spain, in case he became king of France. It was stipulated, that the duke of Savoy should possess the island of Sicily with the title of *king*; together with Fenestrelles, and other places on the continent; which increase of dominion was in some measure made out of the spoils of the French monarchy. The Dutch had the barrier granted them which they so much desired; and if the crown of France was deprived of some dominions to enrich the duke of Savoy, on the other hand the house of Austria was taxed to supply the wants of the Hollanders, who were put in possession of the strongest towns in Flanders. The fortifications of Dunkirk were demolished. Spain gave up Gibraltar and the island of Minorca. France resigned her pretensions to Hudson's bay, Nova Scotia, and Newfoundland; but was left in possession of Cape-Britain, and the liberty of drying fish upon the shore. Among the articles glorious to the British nation, their setting free the French Protestants confined in the prisons and galleys for their religion, was not the least meritorious. For the emperor it was stipulated, that he should possess the kingdom of Naples, the duchy of Milan, and the Spanish Netherlands. The king of Prussia was to have Upper Guelder; and a time was fixed for the emperor's acceding to these articles, as he had for some time obstinately refused to assist at the negotiation. This famous treaty was signed at Utrecht on the last day of March 1713.

This year was also remarkable for an attempt of the Scottish peers and commons to dissolve the union, which, as has been observed, had proved exceedingly disagreeable and distressful to the nation. During the debates on this subject, the earl of Peterborough endeavoured to prove the impossibility of dissolving the treaty, which he compared to a marriage, that, being once contracted, could not be dissolved by any power on earth. He observed, that though England, who in the national marriage, must be supposed to represent the husband, had in some instances been unkind to the lady, she ought not presently to sue for a divorce; and added, when the union was termed a mere political expedient, that it could not have been made more solemn, unless, like the ten commandments, it had come from heaven. The duke of Argyle also, who had originally promoted the union, now declared against it, and said, that unless it were dissolved, he did not long expect to have either property left in Scotland or liberty in England. By some other peers it was alleged, that the union had not produced its intended effect; that it had been designed to promote friendship between the two nations; but, so far from answering the purpose, the animosities between them were never so great as then; and if they were separated again, they would be better friends. This motion was over-ruled in the house; but the discontent of the people still continued, and addresses were prepared throughout the kingdom, and matters were in danger of coming to the worst extremities, when the attempt of the pretender in 1715 so divided the minds of the people, that no unanimous effort could ever afterwards be made; though the union was long generally

considered, and still is by some individuals, as a national grievance.

The history of the latter part of this reign consists entirely of the intrigues of the whigs and tories against each other; which, as they are now of no importance, it is needless to take up time in relating, further than that the tory influence continued to prevail. Whether the ministry at this time wished to alter the succession from the Hanoverian line, cannot now be clearly made out; but certain it is, that the whigs firmly believed it, and the tories but faintly denied the charge. The suspicions of the former became every day stronger, particularly when they saw a total removal of the whigs from all places of trust and confidence throughout the kingdom, and their employments bestowed on professed tories, supposed to be maintainers of an unbroken hereditary succession.

The violent dissensions between these two parties, their unbounded licentiousness, cabals, and tumults, made the queen's situation very disagreeable; her health declined; and on the 28th of July 1714, she fell into a lethargic insensibility. Notwithstanding all the medicines the physicians could prescribe, the distemper gained ground so fast, that next day they despaired of her life. All the members of the privy council without distinction were now summoned from the different parts of the kingdom; and they began to provide for the security of the constitution. A letter was sent to the elector of Hanover, informing him of the queen's desperate situation, and desiring him to repair to Holland, where he would be attended by a British squadron to convey him to England. At the same time they dispatched instructions to the earl of Strafford at the Hague, to desire the States-general to be ready to perform the guaranty of the Protestant succession. Precautions were taken to secure the sea-ports; and the command of the fleet was bestowed upon the earl of Berkely, a professed whig. These measures, which were all dictated by that party, answered a double end. They urged the alacrity of the whigs in the cause of their new sovereign, and seemed to imply that the state was in danger from the disaffection of the opposite party.

On the 30th of July the queen seemed to be somewhat relieved by the medicines which had been given her. She rose from her bed about eight in the morning and walked a little. After some time, casting her eyes on a clock that stood in her chamber, she continued to gaze at it for some minutes. One of the ladies in waiting asked her what she saw there more than usual? to which the queen only answered by turning her eyes upon her with a dying look. She was soon after seized with an apoplectic fit; from which, however, she was somewhat recovered by the assistance of Dr Mead. She continued all night in a state of stupor. She gave some signs of life betwixt twelve and one the next day; but expired the following morning, a little after seven o'clock, having lived 49 years, and reigned upwards of 12. This princess was remarkable neither for her learning nor her capacity. Like all the rest of her family, she seemed rather fitted for the duties of private life than a public station; being a pattern of conjugal fidelity, a good mother, a warm friend, and an indulgent mistress; and to her honour it certainly must be recorded, that during her

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Attempt to dissolve the union.

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Death of the queen.

Britain.

reign none suffered on the scaffold for treason. In her ended the line of the Stuarts; a family who never rewarded their friends, nor ever avenged them of their adversaries; a family whose misfortunes and misconducts are not to be paralleled in history.

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She is succeeded by George I.

The queen had no sooner resigned her breath than the privy-council met, and three instruments were produced, by which the elector of Hanover appointed several of his known adherents to be added as lords justices to the seven great officers of the kingdom. Orders also were immediately issued out for proclaiming George king of England, Scotland, and Ireland. The regency appointed the earl of Dorset to carry him the intimation of his accession to the crown, and to attend him in his journey to England. They sent the general officers, in whom they could confide, to their posts; they reinforced the garrison of Portsmouth, and appointed the celebrated Mr Addison secretary of state. No tumult, no commotion, rose against the accession of the new king; and this gives a strong proof that the tories, had they really intended to exclude him, never took any rational measures to accomplish their purpose.

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He arrives in England.

The king first landed at Greenwich; where he was received by the duke of Northumberland, captain of the lifeguard, and the lords of the regency. From the landing-place he walked to his house in the park, accompanied by a great number of the nobility and other persons of distinction, who expected to make their court in this reign in consequence of their turbulence and opposition to the reigning party in the last. George I. was 54 years old when he ascended the British throne. His mature age, his sagacity and experience, his numerous alliances, and the general tranquillity of Europe, all contributed to establish his interests and promise him a peaceable and happy reign. His virtues, though not shining, were solid; and he was of a very different disposition from the Stuart family whom he succeeded. These were known to a proverb for leaving their friends in extremity; George, on the contrary, soon after his arrival in England, was heard to say, "My maxim is, never to abandon my friends, to do justice to all the world, and to fear no man." To these qualities of resolution and perseverance, he joined great application to business. One fault, however, with regard to England, remained behind: he studied the interests of the kingdom he had left more than of those he came to govern.

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He favours the whigs.

The new king soon discovered his inclination to support those who had raised him to the throne, that is, the whig party. When he retired to his bed-chamber, after his first landing, he sent for such of the nobility as had distinguished themselves by their zeal for his succession. He expressed the greatest regard for the duke of Marlborough just then arrived from the continent, whither he had been driven by the violence of the tories. The same friendship he professed for the other leaders of the whigs; but the tories found themselves excluded from the royal favour. The king did not seem sensible that the monarch of a faction rules but one half of his subjects. It was his misfortune, and consequently that of the nation, that he was hemmed round by men who soured him with all their own interests and prejudices. The whigs, while they pretended to secure the crown for the king, were using all

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their art to confirm their own interests, extend their connections, and give laws to their sovereign. An instantaneous change was made in all the offices of trust, honour, or advantage. The names of the contending parties were changed into those of *Hanoverians* and *Jacobites*. The former governed the senate and court, oppressed whom they would, bound the lower orders of people by severe laws, and kept them at a distance by vile distinctions; and then taught them to call this *liberty*.

In consequence of these partialities, the highest discontents were raised through the whole kingdom. The tories or Jacobites raised the most terrible outcries; and had the pretender been a man of any judgment or abilities, a fair opportunity was now offered him of striking a decisive blow. Instead of this, he continued a calm spectator on the continent, and only sent over his emissaries to disperse ineffectual manifestoes and delude the unwary. In these papers he observed, that the late queen had intentions of calling him to the crown. He expostulated with his people upon the injustice they had done themselves in proclaiming a foreign prince for their sovereign, contrary to the laws of the country, that gave him alone the real claim. Copies of a printed address were sent to the dukes of Shrewsbury, Marlborough, Argyle, and other noblemen of the first distinction; vindicating his right to the crown, and complaining of the injustice of his people. Yet though he still complained of their conduct, he never took any step to correct his own, or remove that obstacle by which his father had lost his throne. He still continued to profess the truest regard to the Catholic religion; and instead of concealing his sentiments on that head, gloried in his principles.

But however much the Popish religion was at that time hated in England, the principles of the dissenters were not in the least more agreeable to the generality. The tories affirmed, that under a whig administration heresy and impiety were daily gaining ground. The lower orders of the clergy joined in these complaints, and pointed out several tracts published in favour of Arianism and Socinianism. The ministry not only refused to punish the delinquents, but silenced the clergy themselves, and forbade their future disputations on these topics.—The parliament was now dissolved, and another called by a very extraordinary proclamation. In this the king complained of the evil designs of men disaffected to his succession; and of their having misrepresented his conduct and principles. He expressed his hopes, that his subjects would send up to parliament the fittest persons to redress the present disorders. He intreated that they would elect such in particular as had expressed a firm attachment to the Protestant succession when it was in danger. In the election of this important parliament, uncommon vigour was exerted on both sides; but by dint of the moneyed interest that prevailed in corporations, and the activity of the ministry, a great majority of whigs was returned both in England and Scotland.

Upon the first meeting of this new parliament, the most violent measures were resolved upon against the late ministry. Part of them kept away from business. A committee was appointed to inspect all the papers relative to the late treaty, and to pick out such of them as might serve for grounds of accusation against

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National discontents.

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Parliament dissolved.

379
Violent proceedings of the new parliament.

Britain.

the late ministry. The earl of Oxford was impeached of high treason, and sent to the Tower. The violence of the commons was answered with equal violence without doors. Tumults became every day more frequent, and every tumult served only to increase the severity of the legislature. They now passed an act, declaring, that if any persons to the number of 12, unlawfully assembled, should continue together one hour after being required to disperse by a justice of peace or other officer, and after hearing the act against riots read in public, they should be deemed guilty of felony without benefit of clergy. This is a very severe act, and one of the greatest restrictions on the liberty of the subject that has passed during this century; as by it all meetings of the people either for the purposes of amusement or redress are rendered criminal, if it shall please any magistrate to consider them as such.

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Rebellion
in Scotland,

These vindictive proceedings excited the indignation of the people, who perceived that the avenues of royal favour were closed to all but a faction. A rebellion commenced in Scotland, where to their other grievances they joined that of the union, which they were taught to consider as an oppression. The malecontents of this country had all along maintained a correspondence with their friends in England, who were now driven by resentment and apprehension into a system of politics they would not otherwise have dreamed of. Some of the tory party, who were men attached to the Protestant religion, and of moderate principles in government, began to associate with the Jacobites, and to wish in earnest for a revolution. Scotland first showed them the example. The earl of Mar, assembling 300 of his vassals in the Highlands, proclaimed the pretender at Castleton; and setting up his standard at Braemar, assumed the title of *lieutenant-general of his majesty's forces*. To second these attempts, two vessels arrived from France, with arms, ammunition, and a number of officers, together with assurances to the earl, that the pretender himself would shortly come over to head his own forces. In consequence of this promise, the earl soon found himself at the head of 10,000 men well armed and provided. He secured the pass of Tay at Perth, where his head-quarters were established; and made himself master of the whole province of Fife, and all the sea-coast on that side of the frith of Forth. He marched from thence to Dumblain, as if he had intended to cross the Forth at Stirling-bridge; but there he was informed that the duke of Argyle, who on this occasion was appointed commander in chief of all the forces in North Britain, was advancing against him from Stirling with all his own clans, assisted by some troops from Ireland. Upon this he thought proper at first to retreat; but being soon after joined by some of the clans under the earl of Seaforth, and others under general Gordon, an experienced officer, who had signalized himself in the Russian service, he resolved to face the enemy, and directed his march towards the south.

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Battle near
Dumblain.

The duke of Argyle, apprised of his intentions, and at any rate willing to prove his attachment to the present government, resolved to give him battle in the neighbourhood of Dumblain, though his forces did not amount to half the number of the enemy. In the morning, therefore, he drew up his army, which did not exceed 3500 men, in order of battle; but he soon found

himself greatly outflanked by the insurgents. The duke, therefore, perceiving the earl make attempts to surround him, was obliged to alter his disposition, which, on account of the scarcity of general officers, was not done so expeditiously as to be finished before the rebels began the attack. The left wing of the duke's army received the centre of the enemy, and supported the first charge without shrinking. It seemed even for a while victorious, and the earl of Clanronald was killed. But Glengary, who was second in command, undertook to inspire his intimidated forces with courage; and waving his bonnet, cried out several times, *Revenge!* This animated the rebel troops to such a degree, that they followed him close to the points of the enemy's bayonets, and got within their guard. A total rout began to ensue of that wing of the royal army; and general Wetham, their commander, flying full speed to Stirling, gave out that the rebels were completely victorious. In the mean time, the duke of Argyle, who commanded in person on the right, attacked the left of the enemy; and drove them before him two miles, though they often faced about, and attempted to rally. Having thus entirely broken that wing, and driven them over the river Allan, he returned back to the field of battle; where, to his great mortification, he found the enemy victorious, and patiently waiting for the assault. However, instead of renewing the engagement, both armies continued to gaze at each other, neither caring to begin the attack. In the evening both parties drew off, and both claimed the victory. All the advantages of a victory, however, belonged to Argyle. He had interrupted the progress of the enemy; and in their circumstances delay was defeat. In fact, the earl of Mar soon found his losses and disappointments increase. The castle of Inverness, of which he was in possession, was delivered up by lord Lovat, who had hitherto professed to act in the interest of the pretender. The marquis of Tullibardine forsook the earl, in order to defend his own part of the country; and many of the clans seeing no likelihood of coming to a second engagement, returned quietly home.

In the mean time, the rebellion was still more unsuccessfully prosecuted in England. From the time the pretender had undertaken this wild project in Paris, in which the duke of Ormond and lord Bolingbroke were engaged, lord Stair, the English ambassador there, had penetrated all his designs, and sent faithful accounts of all his measures and of all his adherents to the ministry at home. Upon the first rumour, therefore, of an insurrection, they imprisoned several lords and gentlemen of whom they had a suspicion. But these precautions were not able to stop the insurrection in the western countries, where it was already begun. All their preparations, however, were weak and ill conducted; every measure was betrayed to government as soon as projected, and many revolts were repressed in the very outset. The university of Oxford was treated with great severity on this occasion. Major-general Pepper, with a strong detachment of dragoons, took possession of the city at day-break, declaring that he would instantly shoot any of the students who should presume to appear without the limits of their respective colleges.

The insurrection in the northern counties came to greater

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Badconduct

Britain.

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Expedition
of the earl of
Derwent-
water.

greater maturity. In the month of October 1715, the earl of Derwentwater and Mr Forster took the field with a body of horse, and being joined by some gentlemen from the borders of Scotland, proclaimed the pretender. Their first attempt was to seize upon Newcastle, in which they had many friends; but finding the gates shut against them, they retired to Hexham. To oppose these, general Carpenter was detached by government with a body of 900 men, and an engagement was hourly expected. The rebels had two methods by which they might have conducted themselves with prudence and safety. The one was to march directly into the western parts of Scotland, and there join general Gordon, who commanded a strong body of Highlanders. The other was to cross the Tweed, and boldly attack general Carpenter, whose forces did not exceed their own. From the infatuation attendant on the measures of that party, neither of these counsels was pursued. They took the rout to Jedburgh, where they hoped to leave Carpenter on one side, and penetrate into England by the western border. This was the effectual means to cut themselves off either from retreat or assistance. A party of Highlanders, who had joined them by this time, at first refused to accompany them in such a desperate incursion, and one half of them actually returned to their own country. At Brampton, Mr Forster opened his commission of general, which had been sent him by the earl of Mar, and there he proclaimed the pretender. They continued their march to Penrith, where the body of the militia that was assembled to oppose them fled at their appearance. From Penrith they proceeded by the way of Kendal and Lancaster to Preston, of which place they took possession without any resistance. But this was the last stage of their ill-advised excursion; for general Wills, at the head of 7000 men, came up to attack them; and from his activity there was no escaping. They now, therefore, began to raise barricades about the town, and to put the place in a posture of defence, repulsing the first attacks of the royal army with success. Next day, however, Wills was reinforced by Carpenter, and the town was invested on all sides. In this deplorable situation, to which they were reduced by their own rashness, Forster hoped to capitulate with the general; and accordingly sent colonel Oxburgh, who had been taken prisoner, with a trumpeter to propose a capitulation. This, however, Wills refused; alleging that he would not treat with rebels, and that the only favour they had to expect was to be spared from immediate slaughter. These were hard terms, but no better could be obtained. They accordingly laid down their arms, and were put under a strong guard. All the noblemen and leaders were secured, and a few of their officers tried for deserting from the royal army, and shot by order of a court-martial. The common men were imprisoned at Chester and Liverpool; the noblemen and considerable officers were sent to London, and led through the streets pinioned and bound together, to intimidate their party.

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Rebels forced to sur-
render at
Preston.385
Absurd
conduct of
James's
party in
France.

Though the schemes of the pretender appear to have been foolishly enough conducted in Britain, yet they were much more so in France. Bolingbroke had been made his secretary at Paris, and Ormond his prime minister. But these statesmen quickly found that no-

thing could be done in favour of his cause. The king of France, who had ever espoused the interest of the abdicated family, was just dead; and the duke of Orleans, who succeeded in the government of the kingdom, was averse to lending the pretender any assistance. His party, however, which was composed of the lowest and the most ignorant exiles from the British dominions, affected the utmost confidence, and boasted of a certainty of success. The deepest secrets of his cabinet, and all his intended measures, were bandied about in coffee-houses by persons of the lowest rank both in fortune and abilities. Subaltern officers resolved to be his generals; and even prostitutes were entrusted to manage his negotiations. Little therefore could be expected from such assistants and such councils.

Though by this time the pretender might easily have seen that his affairs were desperate; yet, with his usual infatuation, he resolved to hazard his person among his friends in Scotland, at a time when such a measure was too late for success. Passing, therefore, through France in disguise, and embarking in a small vessel at Dunkirk, he arrived, after a voyage of a few days, on the coasts of Scotland, with only six gentlemen in his train. He passed unknown through Aberdeen to Feteress, where he was met by the earl of Mar, and about 30 noblemen and gentlemen of the first quality. There he was solemnly proclaimed; and his declaration, dated at Comerey, was printed and dispersed. He went from thence to Dundee, where he made a public entry; and in two days more he arrived at Scoon, where he intended to have the ceremony of his coronation performed. He ordered thanksgivings to be made for his safe arrival; he enjoined the ministers to pray for him in their churches; and without the smallest share of power, went through the ceremonies of royalty, which drew an air of ridicule on all his conduct. Having thus spent some time in unimportant parade, he resolved to abandon the enterprise with the same levity with which it was undertaken. Having made a speech to his grand council, he informed them of his want of money, arms, and ammunition, for undertaking a campaign, and therefore deplored that he was obliged to leave them. He once more embarked on board a small French ship that lay in the harbour of Montrose, accompanied with several lords, his adherents; and in five days arrived at Graveline.

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Pretender
lands in
Scotland;387
And again
leaves it.

General Gordon, who was left commander in chief of the forces, with the assistance of earl Marschal, proceeded at their head to Aberdeen, where he secured three vessels to sail northward, which took on board such persons as intended to make their escape to the continent. He then continued his march through the Highlands, and quietly dismissed his forces as he went forward. This retreat was made with such expedition, that the duke of Argyle, with all his activity, could never overtake his rear, which consisted of 1000 horse.

The rebellion being ended, the law was put in force with all its terrors; and the prisons of London were crowded with those deluded persons, whom the ministry seemed resolved not to pardon. The commons, in their address to the crown, declared they would prosecute in the most rigorous manner the authors of the late rebellion; and their measures were as vindictive as their resolutions were speedy. The earls of

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Cruel treat-
ment of the
rebels.

^{Britain.} Derwentwater, Nithsdale, Carnwath, and Wintown, the lords Widrington, Kenmuir, and Nairne, were impeached; and upon pleading guilty, all but lord Wintown received sentence of death. No intreaties could prevail upon the ministry to spare these unhappy men. The house of lords even presented an address to the throne for mercy, but without effect; the king only answered, that on this, as on all other occasions, he would act as he thought most consistent with the dignity of the crown and the safety of the people. Orders were accordingly dispatched for executing the lords Derwentwater, Nithsdale, and Kenmuir, immediately; the rest were respited to a farther time. Nithsdale, however, had the good fortune to escape in woman's clothes that were brought him by his mother the night before his execution. Derwentwater and Kenmuir were brought to the scaffold on Tower-hill at the time appointed. Both underwent their sentence with calm intrepidity, and seemingly less moved than those who beheld them.

An act of parliament was next made for trying the private prisoners in London, and not in Lancashire where they were taken in arms. This was considered by some of the best lawyers as an alteration of the ancient constitution of the kingdom, by which it was supposed, that every prisoner should be tried in the place where the offence was committed, as a jury of neighbours would be best qualified to enter into the nature of the offence. In the beginning of April, commissioners for trying the rebels met in the court of common pleas, when the bills were found against Mr Forster, Mr Macintosh, and 20 of their confederates. Forster escaped from Newgate, and reached the continent in safety; the rest pleaded not guilty. Pitts the keeper of Newgate, being suspected of having connived at Forster's escape, was tried for his life but acquitted. After this, Macintosh, and several other prisoners, broke from Newgate, after having mastered the keeper and turnkey, and disarmed the centinel. The court proceeded to the trial of those that remained; four or five were hanged, drawn, and quartered at Tyburn. The judges appointed to try the rebels at Liverpool found a considerable number of them guilty of high treason. Two-and-twenty were executed at Manchester and Preston; about 1000 experienced the king's mercy, if such it may be called, to be transported to North America.

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Duration
of the par-
liament
lengthened.

The rebellion being thus extinguished, the danger of the state was made a pretence for continuing the parliament beyond the term fixed for its dissolution. An act, therefore, was made by their own authority, repealing that by which they were to be dissolved every third year, and the term of their duration was extended to seven years. This attempt in any delegated body of people to increase their own power by extending it, is contrary to the first principles of justice. If it was right to extend their duration to seven years, they might also perpetuate their authority; and thus cut off even the shadow of a nomination. The bill, however, passed both houses, and all objections to it were considered as disaffection. The people might murmur at this encroachment, but it was too late for redress.

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Britain
threatened
with an in-
vasion by
Charles XII.

Domestic concerns being thus adjusted, the king resolved upon a voyage to the continent. He foresaw a storm gathering from Sweden. Charles XII. was

highly provoked against him for having entered into a confederacy with the Russians and Danes during his absence at Bender, and for having purchased from the king of Denmark the towns of Bremen and Verden, which constituted a part of his dominions. In consequence of this, Charles maintained a close correspondence with the dissatisfied subjects of Great Britain; and a scheme was formed for landing a considerable body of Swedish forces, with the king at their head, in some part of the island, where it was expected they would be joined by all the malecontents in the kingdom. Count Gyllenburg, the Swedish minister in London, was peculiarly active in the conspiracy; but being seized with all his papers by order of the king, the confederacy was broke for that time. A bill, however, was passed by the commons, forbidding all commerce with Sweden; the trade with which country was at that time of the utmost consequence to the English merchants. George having passed through Holland to Hanover, in order to secure his German dominions, entered into a new treaty with the Dutch and the regent of France, by which they agreed mutually to assist each other in case of an invasion; and for his further security, the commons granted him 250,000*l*. But the death of the Swedish monarch, who was soon after killed at the siege of Frederichshall in Norway, put an end to all disquietude from that quarter.

Among the many treaties for which this reign was remarkable, one had been concluded, which was called the *quadruple alliance*. It was agreed between the emperor, France, Holland, and Britain, that the emperor should renounce all pretensions to the crown of Spain, and exchange Sardinia for Sicily with the duke of Savoy; that the succession to the duchies of Tuscany, Parma, and Placentia, should be settled on the queen of Spain's eldest son, in case the present possessors should die without male issue. This treaty, however, was by no means agreeable to the king of Spain; and consequently it became prejudicial to the English, as it interrupted the commerce with that kingdom. A war soon after commenced between Spain and the emperor, who was considered as the principal contriver of the treaty; and a numerous body of Spanish forces were sent into Italy to support Philip's pretensions in that quarter. The regent of France attempted in vain to dissuade him, and the king of Britain offered his mediation with the like bad success; their interposition was considered as partial and unjust. A Spanish war was then resolved on. A squadron of 22 ships was equipped with all expedition, the command of which was given to Sir George Byng, and ordered to sail for Naples, at that time threatened with a Spanish army. He was received with the greatest joy by the Neapolitans; who informed him, that the Spaniards to the amount of 30,000 were then actually landed in Sicily. In this exigence, as no assistance could be given by land, he resolved to sail thither, fully determined to pursue the Spanish fleet on which the army was embarked. Upon coming round Cape Faro, he perceived two small Spanish vessels; and pursuing them closely, they led him to their main fleet, which before noon he discovered in line of battle, amounting in all to 27 sail. The Spaniards, however, notwithstanding of their superiority in number, attempted to sail away: but finding it impossible to make their escape, they kept up

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War with
Spain.

Britain. up a running fight, and the commanders behaved with great courage and activity; in spite of which they were all taken except three, which were preserved by the conduct of one Cammoc, their vice-admiral, a native of Ireland. Sir George Byng behaved on this occasion with great prudence and resolution; and the king wrote him a letter with his own hand, approving his conduct.

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Intended
invasion by
the Spaniards.

The rupture with Spain was thought to be favourable to the interests of the pretender; and it was hoped that by the assistance of cardinal Alberoni the Spanish minister, a new insurrection might be excited in England. The duke of Ormond was the person fixed upon to conduct this expedition; and he obtained from the Spanish court a fleet of ten ships of war and transports, having on board 6000 regular troops, with arms for 12,000 more. But fortune was still as unfavourable as ever. Having set sail, and proceeded as far as Cape Finisterre, he was encountered by a violent storm, which disabled his fleet, and frustrated the expedition. This misfortune, together with the bad success of the Spanish arms in Sicily and other parts of Europe, induced Philip to wish for a cessation of arms; and he at last consented to sign the quadruple alliance, by which means peace was again restored to Europe.

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Irish parliament made dependent on that of Britain.

Tranquillity being thus established, the ministry proceeded to secure the dependency of the Irish parliament on that of England. One Maurice Annesley had appealed to the house of peers of England from a decree made by the Irish peers, and their decree was reversed. The British peers ordered the barons of exchequer in Ireland to put Mr Annesley in possession of the lands he had lost by the decree of the lords in that kingdom. The barons obeyed this order; and the Irish peers passed a vote against them, as having attempted to diminish the just privileges of the parliament of Ireland; and at the same time ordered the barons to be taken under the custody of the black rod. On the other hand, the house of lords in England resolved, that the barons of the exchequer in Ireland had acted with courage and fidelity; and addressed the king to signify his approbation of their conduct, by some marks of his favour. To complete their intention, a bill was prepared, by which the Irish house of lords was deprived of all right of final jurisdiction. This bill was opposed in both houses, but particularly by the commons. It was there asserted by Mr Pitt, that it would only increase the power of the English peers, who were already but too formidable. Mr Hungerford demonstrated, that the Irish lords had always exerted their power of finally deciding causes. Notwithstanding all opposition, the bill was carried by a great majority, and soon after received the royal assent.

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South-sea scheme.

This blow was severely felt by the Irish; but was by no means so great as that which the English about this time felt from the *South-sea scheme*, which commenced in the year 1721. To explain this as concisely as possible, it must be observed, that ever since the revolution under king William, the government not having sufficient supplies granted by parliament, or what was granted requiring time to be collected, they were obliged to borrow money from several different companies of merchants; and among the rest from that company which traded to the South-sea. In the year 1716, the government was indebted to this company about

Britain. nine millions and an half of money; for which they granted at the rate of 6 per cent. interest. As this company was not the only one to which government was indebted, Sir Robert Walpole formed a design of lessening the national debts, giving the several companies an alternative either of accepting a lower interest, namely 5 per cent. or of being paid the principal. The different companies chose rather to accept of the diminished interest than to be paid the principal. The South-sea company, in particular, having augmented their loan to ten millions, were contented to receive 500,000 l. annually as interest, instead of 600,000 l. which they usually received. In the same manner, the governors and company of the bank, and other companies, were contented to receive a diminished annual interest for their respective loans; all which greatly lessened the debts of the nation.

In this situation of things, one *Blount* a scrivener proposed to the ministry, in the name of the South-sea company, to buy up all the debts of the different companies, and thus for the South-sea company to become the sole creditors of the state. The terms he offered to government were extremely advantageous. The South-sea company was to redeem the debts of the nation out of the hands of the private proprietors who were creditors to the government, upon whatever terms they could agree on; and for the interest of this money which they had thus redeemed and taken into their own hands, they would be contented to be allowed by government 5 per cent. for six years; after which the interest should be reduced to 4 per cent. and should at any time be redeemable by parliament. For these purposes a bill passed both houses. But now came the part of the scheme big with fraud and ruin. As the directors of the South-sea company could not of themselves be supposed to possess so much money as was sufficient to buy up the debts of the nation, they were empowered to raise it by opening a subscription to an imaginary scheme for trading in the South seas; from which commerce immense advantages were promised, and still greater expected by the rapacious credulity of the people. All the creditors of government, therefore, were invited to come in, and exchange their securities, viz. the security of government for that of the South-sea company. The directors books were no sooner opened for the first subscription, than crowds came to make the exchange of government stock for South-sea stock. The delusion was artfully continued and spread. Subscriptions in a few days sold for double the price they had been bought at. The scheme succeeded beyond even the projector's hopes, and the whole nation was infected with a spirit of avaricious enterprise. The infatuation prevailed; the stock increased to a surprising degree, even to near ten times the value of what it was first bought for.

After a few months, however, the people waked from their dream of riches; and found that all the advantages they expected were merely imaginary, while thousands of families were involved in one common ruin. Many of the directors, by whose arts the people were taught to expect such great benefits from a traffic to the South seas, had amassed considerable fortunes by the credulity of the public. It was some consolation, however, to the people to find the parliament sharing in the general indignation, and resolving to strip those

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Directors punished.

unjust.

Britain.

unjust plunderers of their possessions. Orders were first given to remove all the directors of the South-sea company from their seats in parliament, and the places they possessed under government. The principal delinquents were punished by a forfeiture of all such possessions and estates as they had acquired during the continuance of this popular frenzy. The next care was to redress the sufferers. Several just and useful resolutions were taken by parliament and a bill was speedily prepared for repairing the late sufferings as far as the inspection of the legislature could extend. Of the profit arising from the South-sea scheme, the sum of seven millions were given back to the original proprietors; several additions were also made to their dividends out of what was possessed by the company in their own right; and the remaining capital stock was also divided among the old proprietors at the rate of 33 per cent. — In the mean time, petitions from all parts of the kingdom were presented to the house demanding justice; and the whole nation seemed exasperated to the highest degree. Public credit sustained a terrible shock. Some principal members of the ministry were deeply concerned in these fraudulent transactions. The bank was drawn upon faster than it could supply; and nothing was heard but the ravings of disappointment, and the cries of despair.

396
Unsuccessful expedition of admiral Hosier.

By degrees, however, the effects of this terrible calamity wore off, and matters returned to their former tranquillity. A new war with Spain commenced. Admiral Hosier was sent to South America to intercept the Spanish galleons; but the Spaniards being apprised of his design, relanded their treasure. The greatest part of the British fleet sent on that expedition was rendered entirely unfit for service. The seamen were cut off in great numbers by the malignity of the climate and the length of the voyage, while the admiral himself is said to have died of a broken heart. In order to retaliate these hostilities, the Spaniards undertook the siege of Gibraltar; but with as little success on their side. In this dispute France offered her mediation; and such a reconciliation as treaties could procure was the consequence: a temporary peace ensued; both sides only watching an opportunity to renew hostilities with advantage.

397
Death of King Geo. I.

Soon after the breaking up of the parliament in the year 1727, the king resolved to visit his electoral dominions of Hanover. Having appointed a regency in his absence, he embarked for Holland, and lay upon his landing at a little town called Voet. Next day he proceeded on his journey; and in two days more, between ten and eleven at night, arrived at Delden, to all appearance in perfect health. He supped there very heartily, and continued his journey early the next morning; but between eight and nine ordered his coach to stop. It being perceived that one of his hands lay motionless, monsieur Fabrice, who had formerly been servant to the king of Sweden, and who now attended king George, attempted to quicken the circulation, by chafing it between his own. As this had no effect, the surgeon who followed on horseback was called, and he rubbed it with spirits. Soon after, the king's tongue began to swell, and he had just strength enough to bid them hasten to Osnaburgh. Then, falling insensible into Fabrice's arms, he never recovered; but expired about 11 o'clock the next morning, in the 68th year

of his age and 13th of his reign. His body was conveyed to Hanover, and interred among his ancestors.

On the accession of George II. the two great parties into which the nation had so long been divided, again changed their names, and were now called the *court*

and *country* parties. Throughout the greatest part of this reign, there seem to have been too objects of controversy which rose up in debate at every session, and tried the strength of the opponents; these were the national debt, and the number of forces to be kept in pay.

The government on the present king's accession owed more than 30,000,000 of money; and tho' there was a long continuance of profound peace, yet this sum was found constantly increasing. It was much wondered at by the country party how this could happen, and it was as constantly the business of the court to give plausible reasons for the increase. Thus demands for new supplies were made every session of parliament, either for the purposes of securing friends upon the continent, or guarding the kingdom from internal conspiracies, or of enabling the ministry to act vigorously in conjunction with the powers in alliance abroad. It was vainly alleged, that those expences were incurred without preference or necessity; and that the increase of the national debt, by multiplying and increasing taxes, would at last become an intolerable burden to the poor. These arguments were offered, canvassed, and rejected; the court party was constantly victorious, and every demand was granted with cheerfulness and profusion.

The next thing worthy of notice in the reign of George II. is the *charitable corporation*. A society of men had united themselves into a company by this name; and their professed intention was to lend money at legal interest to the poor upon small pledges, and to persons of higher rank upon proper security. Their capital was at first limited to L. 30,000, but they afterwards increased it to L. 600,000. This money was supplied by subscription, and the care of conducting the capital was intrusted to a proper number of directors. This company having continued for more than 20 years, the cashier, George Robinson, member for Marlow, and the warehouse-keeper, John Thomson, disappeared in one day. Five hundred thousand pounds of capital were found to be sunk or embezzled by means which the proprietors could not discover. They therefore in a petition represented to the house the manner in which they had been defrauded, and the distress to which many of the petitioners were reduced. A secret committee being appointed to examine into this grievance, a most iniquitous scene of fraud was soon discovered, which had been carried on by Thomson and Robinson, in concert with some of the directors, for embezzling the capital and cheating the proprietors. Many persons of rank and quality were concerned in this infamous conspiracy; and even some of the first characters in the nation did not escape censure. No less than six members of parliament were expelled for the most sordid acts of knavery. Sir Robert Sutton, Sir Archibald Grant, and George Robinson, for their frauds in the management of the charitable corporation scheme; Dennis Bond, and serjeant Burch, for a fraudulent sale of the late unfortunate earl of Derwentwater's estate; and, lastly, John Ward of Hackney, for forgery. It was at this time asserted in the house of Lords, that not one shilling of the forfeited estates was ever applied to

Britain.

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George II. succeeds.

399
Contests between the court and country parties.

400
Account of the charitable corporation.

⁴⁰¹ Britain. the service of the public, but became the reward of fraudulence and venality.

Excise
scheme re-
jected. This happened in the year 1731; and in 1732, a scheme was formed by Sir Robert Walpole of fixing a general excise. He introduced it by recounting the frauds practised by the factors in London that were employed in selling the American tobacco. To prevent these frauds, he proposed, that instead of having the customs levied in the usual manner upon tobacco, all hereafter to be imported should be lodged in warehouses appointed for that purpose by the officers of the crown; and should from thence be sold, upon paying the duty of 4d. per pound, when the proprietor found a purchaser. This proposal raised a violent ferment both within doors and without. At last, the fury of the people was worked up to such a pitch, that the parliament-house was surrounded by multitudes, who intimidated the ministry, and compelled them to drop the design. The miscarriage of the bill was celebrated with public rejoicings in London and Westminster, and the minister was burnt in effigy by the populace at London.

⁴⁰² Parliament dissolved. On this occasion an attempt was made to repeal the septennial bill, and bring back triennial parliaments, as settled at the Revolution. But notwithstanding the warmth of the opposition, the ministry, exerting all their strength, were victorious, and the motion was suppressed by the majority. However, as on this occasion the country-party seemed to have gained strength, it was thought proper to dissolve the parliament; and another was called by the same proclamation.

The same disputes were carried on in this parliament as in the former. New subjects of controversy offered every day, and both sides were eager to seize them. A convention agreed on by the ministry at the Brado with Spain, became an object of warm altercation. By this the court of Spain agreed to pay 95,000l. to the English, as a satisfaction for all demands; and to discharge the whole in four months from the day of ratification. This, however, was considered as not equivalent to the damages that had been sustained, which were said to amount to 340,000l. On this occasion the minister was provoked into unusual vehemence, and branded the opposite party with the appellation of traitors. The ministry, as usual, were victorious; and the country party finding themselves out-numbered and out-voted in every debate, resolved to withdraw for ever: Walpole being thus left without opposition, took the opportunity of passing several useful laws in their absence, in order to render the opposite party odious or contemptible.

⁴⁰³ War with Spain. In 1739, a new war commenced with Spain. Ever since the treaty of Utrecht, the Spaniards in America had insulted and distressed the commerce of Great Britain; and the British merchants had endeavoured to carry on an illicit trade in their dominions. As a right of cutting logwood in the bay of Campeachy, claimed by the British, gave them frequent opportunities of pushing in contraband commodities upon the continent, the Spaniards resolved to put a stop to the evil by refusing liberty to cut logwood in that place. ⁴⁰⁴ The Spanish guarda-costas continued their severities upon the British, and many British subjects were sent to dig in the mines of Potosi. One remonstrance followed another to the court of Madrid; but the only an-

swers given were promises of inquiry, which produced no reformation. In 1739, war was declared with all proper solemnity; and soon after, admiral Vernon, with six ships only, destroyed all the fortifications of Porto Bello, and came away victorious with scarce the loss of a man.

As the war was thus successfully begun, supplies were cheerfully granted to prosecute it with all imaginable vigour. Commodore Anson was sent with a squadron of ships to distress the enemy in the South seas, and to co-operate occasionally with admiral Vernon across the isthmus of Darien. This squadron was designed to act a subordinate part to a formidable armament that was to be sent against New Spain; but through the mismanagement of the ministry both these schemes were frustrated. Anson was detained till too late in the season; he then set out with five ships of the line, a frigate, and two store-ships, with about 1400 men. Coming into the stormy South seas at a very wrong season of the year, he encountered the most terrible storms; his fleet was dispersed, and his crew deplorably afflicted with the scurvy; so that with much difficulty he gained the delightful island of Juan Fernandez. Here he was joined by one ship and a frigate of seven guns. From thence sailing along the coast of Chili, he plundered and burnt the town of Paita. He next traversed the great pacific ocean, in hopes of meeting with one of the immensely-rich galleons that trade from the Philippine islands to Mexico. Having refreshed his men at the island of Tinian, he set forward for China; and returning the same way he came, at last discovered the galleon. Her he engaged and took; and with this prize, valued at 313,000l. together with other captures to the value of about as much more, he returned home after a voyage of three years. By this expedition the public sustained the loss of a fine squadron of ships, but a few individuals became possessed of immense fortunes.

⁴⁰⁶ The other expedition ended still more unfortunately. Unsuccessful attempt on Carthage. The armament consisted of 29 ships of the line, and almost an equal number of frigates, furnished with all kinds of warlike stores, near 15,000 seamen, and as many land forces. The most sanguine hopes of success were entertained; but the ministry detained the fleet without any visible reason, till the season for action in America was almost over. At last, however, they arrived before the wealthy city of Carthage. They soon became masters of the strong forts which defended the harbour. But though by this means they advanced a good deal nearer the town, they found great difficulties still before them. It was asserted, that the fleet could not lie near enough to batter the town, and therefore the remaining forts must be attempted by scalade. This dangerous experiment was tried; the guides were slain by the enemy's fire, and then the forces mistook their way. Instead of attempting the weakest place of the fort, they attacked the strongest, and where they were exposed to the fire of the whole town. Their scaling ladders were too short; and, at last, after bearing a dreadful fire with great resolution for some hours, they retreated, leaving 600 men dead on the spot. The terrors of the climate now began to be more dreadful than those of war. The rainy season commenced with such violence, that it was impossible for the troops to continue their encampment. To these calamities was added

⁴⁰⁷ ^{Britain.} added the dissension between the sea and land commanders, who blamed each other, and at last could be only brought to agree in one mortifying measure, viz. to re-imbark the troops, and withdraw them as quick as possible.

^{Resignation} ^{of Sir Robert Wal-} ^{pole.} The miscarriage of this enterprise produced the greatest discontents; especially as other causes of complaint were now joined with it. Sir John Norris had twice failed to the coast of Spain at the head of a very powerful squadron, without doing any thing to the purpose. The commerce of Britain was greatly annoyed by the Spanish privateers, who had taken 407 ships since the commencement of the war; while the British fleets seemed to be quite inactive, and to suffer one loss after another, without endeavouring in the least to make proper reprisals. These discontents burst all at once upon Sir Robert Walpole; a majority in the house of commons was formed against him; he was created earl of Orford, the parliament being adjourned for a few days for that purpose; and he resigned all his employments.

⁴⁰⁸ ^{An army} ^{sent into} ^{Flanders.} The removal of this minister gave universal satisfaction. His antagonists entertained great hopes of seeing him punished: but he had laid his schemes too well to be under any apprehensions on that account; and what was worse, the new ministry were no sooner got in, than they trod in the footsteps of those they had so much exclaimed against. The nation had now become disgusted with naval operations. The people wished for a renewal of their victories in Flanders, and the king ardently joined in the same wish. An army of 16,000 men was therefore shipped over into Flanders, to take part in the quarrels that were then beginning on the continent. Immense triumphs were expected from this undertaking; but they forgot that the army was not now commanded by the duke of Marlborough.

⁴⁰⁹ ^{Origin of} ^{the conti-} ^{nental war.}

In order to give some notion of the origin of these continental quarrels, it is necessary to go back for some years. After the duke of Orleans, who had been regent of France, died, cardinal Fleury undertook to settle the confusion in which the kingdom was then involved. Under him France repaired her losses, and enriched herself by commerce. During the long interval of peace which this minister's councils had procured for Europe, two powers, till now unregarded, began to attract the notice and jealousy of the neighbouring nations. These were Russia and Prussia. The other states were but little prepared to renew war. The empire remained under the government of Charles VI. who had been placed on the throne by the treaty of Utrecht. Sweden continued to languish from the destructive projects of Charles XII. Denmark was powerful enough, but inclined to peace; and part of Italy still remained subject to those princes who had been imposed upon it by foreign treaties.

All these states, however, continued to enjoy a profound peace until the death of Augustus king of Poland, by which a general flame was once more kindled in Europe. The emperor, assisted by the arms of Russia, declared for the elector of Saxony, son to the deceased king. On the other hand, France declared for Stanislaus, who had long since been nominated king of the Poles by Charles of Sweden, and whose daughter the king of France had since married. Stanislaus was gladly received at Dantzic, and acknowledged king of

Poland; but here he was besieged by 10,000 Russians, the city taken, and he himself with difficulty made his escape. France, however, still resolved to assist him; as this, it was thought, would be the most effectual method of distressing the house of Austria. These views of France were seconded by Spain and Sardinia, both of which hoped to grow rich by the spoils of Austria. A French army, therefore, over-ran the empire, under the conduct of the old marshal Villars; while the duke of Montemar, the Spanish general, was equally victorious in the kingdom of Naples. The emperor was soon obliged to sue for peace; which was granted, but Stanislaus was neglected in the treaty. It was stipulated that he should renounce all claim to the kingdom of Poland; for which the emperor gratified France with the duchy of Lorraine and some other valuable territories.

The emperor dying in the year 1740, the French began to think this a favourable opportunity for exerting their ambition. Regardless of treaties, therefore, particularly that called the *Pragmatic Sanction*, by which the late emperor's dominions were settled upon his daughter, they caused the elector of Bavaria to be crowned emperor. Thus the queen of Hungary, daughter of Charles VI. was at once stripped of her inheritance, and was left for a whole year deserted by all Europe, and without any hopes of succour. At the same time she lost the province of Silesia by an irruption of the young king of Prussia, who took the opportunity of her defenceless state to renew his pretensions to that province, of which his ancestors had been unjustly deprived. France, Saxony, and Bavaria, attacked the rest of her dominions: Britain was the only ally that seemed willing to assist her; in which, however, Sardinia, Holland, and Russia, soon after concurred.

It must be owned that Britain had no other reason for interfering in these disputes, than that the security of the electorate depended upon nicely balancing the different interests of the empire; and the ministry were willing to gratify the king. His majesty informed the parliament, that he had sent a body of British forces into the Netherlands, which he had augmented by 16,000 Hanoverians, to make a diversion upon the dominions of France, in favour of the queen of Hungary. When the supplies came to be considered by which this additional number of Hanoverian troops was to receive pay from Britain for defending their own cause, most violent parliamentary debates ensued; but the ministry carried their point by the strength of numbers.

But however prejudicial these continental measures might be to the true interests of Great Britain, they effectually retrieved the queen of Hungary's desperate affairs, and soon began to turn the scale of victory on her side. The French were driven out of Bohemia. Her general, prince Charles, at the head of a large army, invaded the dominions of Bavaria. Her rival, the nominal emperor, was obliged to fly before her; and being abandoned by his allies, and stripped even of his hereditary dominions, retired to Frankfort, where he lived in obscurity.

In the mean time, the British and Hanoverian army advanced, in order to effect a junction with that of prince Charles of Lorraine, in which case they would have outnumbered their enemies. To prevent this, the French opposed an army of 60,000 men, under the command of the marshal de Noailles, who posted his troops on the

⁴¹⁰ ^{Desperate} ^{situation of} ^{the queen of} ^{Hungary.}

⁴¹¹ ^{Relieved by} ^{the British} ^{forces.}

⁴¹² ^{Battle of} ^{Dettingen.}

⁴¹³ **Britain.** the east side of that river. The British army was commanded by the earl of Stair, who had learned the art of war under the great prince Eugene; nevertheless, he suffered himself to be inclosed by the enemy on every side, near a village called *Dettingen*. In this situation, the whole army, with the king himself, who had by this time arrived in the camp, must have been taken, had the French behaved with prudence. Their impetuosity, however, saved the whole army. They passed a defile which they ought to have contented themselves with guarding; and, under the conduct of the duke of Gramont, their horse charged the British foot with great fury. They were received with great resolution; and at last obliged to repass the Mayne with precipitation, and the loss of about 5000 men.

⁴¹³ Intended
invasion
of Britain
by the
French.

Though the British were victorious in this engagement, the French were very little disconcerted by it. They opposed prince Charles, and interrupted his attempts to pass the Rhine. In Italy they also gained some advantages; but their chief hopes were placed on an intended invasion of England. From the violence of parliamentary disputes in England, France had been persuaded that the country was ripe for a revolution, and only wanted the presence of the pretender to bring about a change. An invasion was therefore actually projected. The troops destined for the expedition amounted to 15,000; and preparations were made for embarking them at Dunkirk and some of the ports nearest to England, under the eye of the young pretender. The duke de Roquefuille, with 20 ships of the line, was to see them safely landed on the opposite shore, and the famous count Saxe was to command them when landed. But the whole project was disconcerted by the appearance of Sir John Norris, who with a superior fleet made up to attack them. The French fleet was obliged to put back; a very hard gale of wind damaged their transports beyond redress; and the French, now frustrated in their scheme of a sudden descent, thought fit openly to declare war.

⁴¹⁴ Battle of
Fontenoy.

The national joy for Sir John Norris's success, however, was soon damped by the miscarriage of admirals Matthews and Lestock; who, thro' a misunderstanding between themselves, suffered a French fleet of 34 sail to escape them near Toulon. In the Netherlands the British arms were attended with still worse success. The French had there assembled an army of 120,000 men, commanded by count Saxe, natural son to the late king of Poland, an officer of great experience. The English were headed by the duke of Cumberland, who had an inferior army, and was much inferior in the knowledge of war to the French general. Count Saxe, therefore, carried all before him. In 1743, he besieged Fribourg, and in the beginning of the campaign 1744, invested the strong city of Tournay. To save this place, if possible, the allies resolved to hazard an engagement; and on this ensued the bloody battle of Fontenoy, in which the allies left on the field of battle near 12,000 men, and the French almost an equal number. In consequence of this victory, Tournay was soon after taken by the French. To balance the bad success, however, admirals Rowley and Warren had retrieved the honour of the British flag, and made several rich captures at sea. The fortress of Louisbourg, a place of great consequence to the British commerce, surrendered to general Pepperell; while a short time after, two French East-

India ships, and a Spanish ship from Peru laden with treasure, put into the harbour, supposing it still their own, and were taken.

⁴¹⁶ During this gleam of returning success, Charles Edward, the son of the old pretender to the British crown, resolved to make an attempt to recover what he called his right. Being furnished with some money from France, he embarked for Scotland aboard a small frigate, accompanied by the marquis of Tullibardine, Sir Thomas Sheridan, and some others; and for the conquest of the whole British empire, only brought with him seven officers and arms for 2000 men.

Fortune, however, seemed no way more favourable to this attempt than to others similar to it. His convoy, a ship of 60 guns, was so disabled in an engagement with an English man of war, that it was obliged to return to Breil, while he continued his course to the western parts of Scotland. On the 27th of July 1745, he landed on the coast of Lochaber, and was in a little time joined by the Highlanders to the number of 1500: the ministry at first could scarcely be induced to credit his arrival; but when they could no longer doubt of it, they sent Sir John Cope with a small body of forces to oppose his progress.

⁴¹⁷ By this time the young adventurer was arrived at Perth, where he performed the ceremony of proclaiming his father king of Great Britain. From thence descending towards Edinburgh, and his forces continually increasing, he entered the capital without opposition; but was unable, from want of cannon, to reduce the castle. Here he again proclaimed his father; and promised to dissolve the union, which was considered as one of the national grievances. In the mean time, Sir John Cope being reinforced by two regiments of dragoons, resolved to give the enemy battle. The rebels attacked him near Prestonpans, and in a few minutes put him and his troops to flight, with the loss of 500 men.

⁴¹⁷ Gains the
battle of
Preston-
pans.

This victory gave the rebels great influence; and had the pretender marched directly to England, the consequence might have been fatal to freedom. But he was amused by the promise of succours which never came; and thus induced to remain in Edinburgh till the season for action was lost. He was joined, however, by the earl of Kilmarnock, lord Balmerino, lords Cromarty, Elcho, Ogilvy, Pittligo, and the eldest son of lord Lovat, who with their vassals considerably increased his army. Lord Lovat himself, so remarkable for his treachery, was an enthusiast in favour of the pretender, but was unwilling to act openly for fear of the ministry. But while Charles was thus trifling away his time at Edinburgh, the British ministry were taking effectual methods to oppose him. Six thousand Dutch troops, that had come over to the assistance of the crown, were dispatched northward under the command of general Wade; but, as it was then said, these could lend no assistance, being prisoners of France upon their parole, and under engagements not to oppose that power for a year. But however this be, the duke of Cumberland soon after arrived from Flanders, and was followed by another detachment of dragoons and infantry, well disciplined and inured to action; and besides these, volunteers offered themselves in every part of the kingdom.

At last, Charles resolved upon an irruption into
4 M Eng-

⁴¹⁵ Louisbourg
taken.

Britain.
418
Invades
England.

England. He entered that country by the western border, and took the town of Carlisle; after which he continued his march southwards, having received assurances that a considerable body of forces would be landed on the southern coasts to make a diversion in his favour. He established his head-quarters at Manchester, where he was joined by about 200 English formed into a regiment, under the command of colonel Townley. From thence he pursued his march to Derby, intending to go by the way of Chester into Wales, where he hoped to be joined by a great number of malecontents; but in this he was prevented by the factions among his followers.

419
Great con-
sternation
at London.

Being now advanced within 100 miles of London, that capital was in the utmost consternation; and had he proceeded with the same expedition he had hitherto used, perhaps he might have made himself master of it. But he was rendered incapable of pursuing this or any other rational plan, by the discontents which began to prevail in his army. In fact, the young pretender was but the nominal leader of his forces; his generals, the Highland chiefs, being averse to subordination, and ignorant of command. They were now unanimous in their resolution to return to their own country, and Charles was forced to comply. They retreated to Carlisle without any loss; and from thence crossing the rivers Eden and Solway, entered Scotland. They next marched to Glasgow, which was laid under severe contributions. From thence advancing to Stirling, they were joined by lord Lewis Gordon at the head of some forces which had been assembled in his absence. Other clans likewise came in; and from some supplies of money received from Spain, and some skirmishes with the royalists, in which he was victorious, the pretender's affairs began to wear a more promising aspect. Being joined by lord Drummond, he invested the castle of Stirling, in the siege of which much time was consumed to no purpose. General Hawley, who commanded a considerable body of forces near Edinburgh, undertook to raise this siege, and advanced towards the rebel army as far as Falkirk. After two days spent in mutually examining each others strength, an engagement ensued, in which the king's forces were entirely defeated, with the loss of their tents and artillery.

421
Gain the
battle of
Falkirk.

422
Entirely de-
feated at
Culloden.

* See Cu-
lloden.

This was the end of all the triumphs of the rebel army. The duke of Cumberland having arrived, was put at the head of the troops at Edinburgh, which amounted to about 14,000 men. With these he advanced to Aberdeen, where he was joined by several of the nobility attached to the house of Hanover; the enemy in the mean time retreating before him. He next advanced to the banks of the Spey, a deep and rapid river, where the rebels might have disputed his passage; but their contentions with one another were now risen to such a height, that they could scarce agree in any thing. At last they resolved to wait their pursuers. An engagement ensued at Culloden*, near Inverness; in which the rebels were defeated with great slaughter, and a final period was put to all the hopes of the young adventurer. The conquerors behaved with the greatest cruelty; refusing quarter to the wounded, the unarmed, and the defenceless; some were slain who had only been spectators of the combat, and soldiers were seen to anticipate the base employment of the executioner. The duke im-

mediately after the action ordered 36 deserters to be executed: the conquerors spread terror wherever they came; and after a short space, the whole country round was one dreadful scene of plunder, slaughter, and desolation.

Immediately after the engagement, the young pre-⁴²³tender fled away with a captain of Fitzjames's cavalry; and when their horses were fatigued, they both alighted, and separately sought for safety. There is a striking resemblance between the adventures of Charles II. after the battle of Worcester, and those of the young pretender after the battle of Culloden. For some days he wandered in the country. Sometimes he found refuge in caves and cottages, without any attendants at all. Sometimes he lay in forests with one or two companions of his distress, continually pursued by the troops of the conqueror, there being a reward of 30,000 l. offered for taking him either dead or alive. In the course of his adventures, he had occasion to trust his life to the fidelity of above 50 individuals; not one of whom could be prevailed upon by so great a reward as was offered, to betray him whom they looked upon to be their king's son.

For six months the unfortunate Charles continued to wander in the frightful wilds of Glengary, often hemmed round by his pursuers, but still rescued by some providential accident from the impending danger. At length, a privateer of St Maloes, hired by his adherents, arrived in Lochranach, in which he embarked in the most wretched attire. He was clad in a short coat of black frize, thread-bare; over which was a common Highland plaid girt round him by a belt, from which hung a pistol and dagger. He had not been shifted for many weeks; his eyes were hollow, his visage wan, and his constitution greatly impaired by famine and fatigue. He was accompanied by Sullivan and Sheridan, two Irish adherents, who had shared all his calamities; together with Cameron of Lochiel, his brother, and a few other exiles. They set sail for France; and after having been chased by two English men of war, arrived in safety at a place called *Roseau* near Morlaix in Bre-⁴²⁴tagne. He escapes.

While the pretender was thus pursued, the scaffolds⁴²⁵ and gibbets were preparing for his adherents. Seventeen officers were hanged, drawn, and quartered, at Kennington-common in the neighbourhood of London; nine were executed in the same manner at Carlisle, and eleven at York. A few obtained pardons, and a considerable number of the common men were transported to America. The earls of Kilmarnock and Cromarty, and lord Balmerino, were tried and found guilty of high treason. Cromarty was pardoned: but Kilmarnock and Balmerino were executed; as was also Mr Radcliffe brother to the late earl of Derwentwater, who was sentenced upon a former conviction. Lord Lovat was tried, and suffered some time after.

Immediately after the suppression of the rebellion, the legislature undertook to establish several regulations⁴²⁶ in Scotland, which were equally conducive to the happiness of the people and the tranquillity of the united kingdoms. The Highlanders had till that time continued to wear the military dress of their ancestors, and never went without arms. In consequence of this, they considered themselves as a body of people distinct from the rest of the nation, and were ready upon the shortest notice

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notice to second the insurrections of their chiefs. Their habits were now reformed by an act of legislature, and they were compelled to wear clothes of the common fashion. But what contributed still more to their real felicity was, the abolition of that hereditary jurisdiction which their chieftains exerted over them. The power of their chieftains was totally destroyed, and every subject in that part of the kingdom was granted a participation in the common liberty.

427
Allies de-
feated in
Flanders.

Soon after the battle of Culloden, the duke of Cumberland returned to Flanders, where he resumed the command of an army to which he was by no means equal. The French carried every thing before them; and they reduced under their dominion all those strong towns which had been taken by the duke of Marlborough, and formed a barrier to the United Provinces. They gained a considerable victory at Roucroux; which, however, cost them as many men as they destroyed of the enemy; but these they could more easily spare, as they were much more numerous. Another victory which they obtained at La Feldt, served to depress the allied army still lower. But the taking of Bergen-op-zoom, the strongest fortification of Brabant, reduced the Dutch to a state of desperation.

428
Losses of
the French
in other
parts.

These victories and successes in Flanders were, however, counterbalanced by almost equal disappointments. In Italy the marshal Belleisle's brother, attempting to penetrate at the head of 34,000 men into Piedmont, was defeated and killed. A fleet was fitted out for the recovery of Cape Breton, but without success. Two others were fitted out, the one to make a descent upon the British colonies in America, and the other to carry on the operations in the East Indies; but these were attacked by Anson and Warren, and nine of their ships taken. Soon after this, commodore Fox, with six ships of war, took above 40 French ships richly laden from St Domingo; and soon after this the French fleet was defeated by admiral Hawke, who took seven ships of the line and several frigates.

429
Peace of
Aix-la-Cha-
pelle.

For a long time Louis had been desirous of a general tranquillity; and this desire he had even expressed to Sir John Ligonier, who was taken prisoner at the battle of La Feldt. But now the bad success of his admirals at sea, his armies in Italy, the frequent bankruptcies of his merchants at home, and the election of a stadtholder in Holland, who gave spirit to the opposition; all these contributed to make him weary of the war, and to propose terms of accommodation. This was what the allies had long wished for, but had been ashamed to demand. A congress, therefore, was held at Aix-la-Chapelle, where a treaty was concluded on the following terms: 1. That all prisoners on each side should be mutually given up, and all conquests restored. 2. That the duchies of Parma, Placentia, and Guastalla, should be ceded to Don Philip, heir apparent to the Spanish crown; after whom these dominions should return to the house of Austria. 3. That the fortifications of Dunkirk towards the sea should be demolished; and that the British ship annually sent with slaves to the coast of New Spain should have this privilege continued for four years. 4. That the king of Prussia should be confirmed in the possession of Silesia, and that the queen of Hungary should be secured in the possession of her patrimonial dominions. But the most mortifying clause was, that the king of Great Britain should immediately,

after the ratification of this treaty, send two persons of rank to France as hostages, until restitution should be made of Cape Breton and all other British conquests made during the war. No mention was made of the searching British vessels in the American seas, though this was the original cause of the quarrel. The limits of their respective possessions in North America were not ascertained; nor did they receive any equivalent for those forts which they restored to the enemy.

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In the year 1751, died Frederic prince of Wales, of a pleureisy thought at first to be no way dangerous. He was greatly regretted; for his good-nature had rendered him popular, and those who opposed the present administration had grounded all their hopes of redress upon his accession to the throne.

430
Death of
the prince
of Wales.

Some time before this, viz. in the year 1749, a scheme was entered upon, which the nation in general imagined would be very advantageous. This was the encouraging those who had been discharged the army or navy to become settlers in Nova Scotia. This country is cold, barren, and almost incapable of cultivation. Nevertheless, on account of this barren spot, the English and French renewed the war, which soon after spread with such terrible devastation over every part of the globe. The possession of this country was reckoned necessary to defend the English colonies to the north, and to preserve their superiority in the fisheries in that part of the world. The French, however, who had been long settled in the back parts, resolved to use every method to dispossess the new comers, and spirited up the Indians to begin hostilities. Another source of dispute also sprung up soon after in the same part of the world. The French pretending to have first discovered the mouth of the river Mississippi, claimed the whole adjacent country towards New Mexico on the east, quite to the Apalachian mountains on the west. In order to assert their claims, as they found several English who had settled beyond these mountains, they dispossessed them of their new settlements, and built such forts as would command the whole country round about.

431
Hostilities
renewed.

Negotiations, mutual accusations, and hostilities, first took place between the two powers; at length, in 1756, four operations were undertaken by the British in America at once. Colonel Monkton had orders to drive the French from their encroachments upon the province of Nova Scotia. General Johnson was sent against Crown Point; General Shirley against Niagara, to secure the forts on the river; and General Braddock against Fort du Quesne. In these expeditions, Monkton was successful; Johnson also was victorious, though he failed in taking the fort against which he was sent; Shirley was thought to have lost the season of operation by delay; and Braddock was defeated and killed.

In return for this bad success, the British made reprisals at sea; and in this they were so successful, that the French navy was unable to recover itself during the continuance of the war that was shortly after declared on both sides. The first step of the French was to threaten an invasion. Several bodies of their troops were sent down to the coasts that lay opposite to the British shores; these were instructed in the manner of embarking and relanding from flat-bottomed boats, which were made in great numbers for that expedition.

⁴³² Britain. The number of men amounted to 50,000: but all discovered the utmost reluctance to the undertaking. The ministry were greatly alarmed. They applied to the Dutch for 6000 men, which they were by treaty obliged to furnish in case of an invasion. This supply was refused; the Dutch alleging, that their treaty was to send the troops in case of an actual, and not a threatened, invasion. The king, therefore, finding he could not have the Dutch forces till their assistance would be too late, desisted entirely from his demand; and the Dutch with great amity returned him thanks for withdrawing his request. Upon this, 10,000 Hessians and Hanoverians were brought over. But this occasioned great discontent. The ministry were reviled for such disgraceful condescension, as if the nation was unable to defend itself. The people only demanded a vigorous exertion of their own internal strength, and then feared no force that could be led to invade them.

⁴³² Minorca invaded.

The British invasion, however, never took place: but a French army landed in Minorca, and invested the citadel of St Philip's, which was reckoned the strongest in Europe; but the garrison was weak, and no way fitted to stand a vigorous siege. To raise this siege, admiral Byng was dispatched with a squadron of ten men of war, with orders to relieve Minorca, or at any rate to throw a body of troops into the garrison. This last he reckoned too hazardous an undertaking; nor did he even attempt it. Soon after, a French fleet appeared nearly equal in force to his own; but the admiral resolved to act only upon the defensive. The French advanced; a slight engagement ensued with part of the English fleet; after which, the French slowly sailed away, and another opportunity never occurred of coming to a closer engagement. After this, it was resolved in a council of war, to return to Gibraltar to refit, and that the relief of Minorca was impracticable. For this conduct Byng was brought home under arrest, tried, and sentenced to death. His sentence was to be shot; and he suffered with the greatest resolution, after delivering a paper filled with protestations of his innocence as to any treacherous intention.

⁴³³ Admiral Byng executed.

⁴³⁴ Treaty with Russia. After the conquest of Minorca, the French declared that they would revenge all injuries they should sustain in their colonies on the king of Britain's dominions in Germany. Upon this, the court of London, eager to preserve Hanover, entered into a treaty with the court of Russia, by which it was stipulated, that a body of 50,000 Russians should be ready to act in the British service, in case Hanover should be invaded by the French. For this the czarina was to receive 100,000 l. annually, to be paid in advance. This treaty was opposed by the king of Prussia. He had long considered himself as guardian of the interests of Germany, and was therefore alarmed at a treaty which threatened to deluge the empire with an army of barbarians. Besides, he was already apprised of an agreement between the Austrians and Russians, by which the latter were to enter the empire and strip him of his late conquest of Silesia. He therefore declared, that he would not suffer any foreign forces to enter the empire either as auxiliaries or principals. The king of Britain now found himself obliged to drop his Russian connection, and conclude a treaty with the king of Prussia. As both monarchs wished only to prevent the invasion of

⁴³⁵ Opposed by the king of Prussia.

Germany, they soon came to an agreement to assist each other mutually. From this alliance a new combination took place among the European powers, quite opposite to the former; and their forces were drawn out in the following manner. Britain opposed France in America, Asia, and on the ocean. France attacked Hanover; which the king of Prussia undertook to protect, while Britain promised him troops and money to assist his operations. Austria had their aims on the dominions of Prussia, and drew the elector of Saxony into the same designs. In these views the Austrians were seconded by France, Sweden, and Russia, who had hopes of acquiring a settlement in the west of Europe.

Thus the king of Prussia lanced into the tumult of war, having only the king of Britain for his ally, while the most potent states of Europe were his antagonists. He now performed exploits perhaps unequalled in the annals of modern ages; for a particular account of which, see the article PRUSSIA. The British ministry, in order to procure a diversion in his favour, planned an enterprise against the coast of France. The destination of the fleet equipped for this purpose was kept a profound secret. At last it appeared before Rochford; where the commanders, having trifled away their time in deliberating how to proceed, secured the little island of Aix, an easy and an useless conquest: soon after which, they returned home without attempting any thing else. By this miscarriage the ministry were so discouraged, that they had thoughts of abandoning the king of Prussia to his fate; and the king was actually meditating a negotiation of this nature, when he was prevented by the expostulations of his distressed ally. From motives of generosity, therefore, more than of interest, it was resolved to continue to assist him; and success, which had long fled from the British arms, once more began to return with double splendor.

It was in the East Indies where this returning success first began to appear (for an account of which see the article INDOSTAN); and their conquests in the western part of the world were about this time still more splendid than those in the east. But these successes must, partly at least, be ascribed to the vigorous administration of Mr William Pitt, who about this time came into power. An expedition was set on foot against Cape Breton, under general Amherst and admiral Boscawen; another, under general Abercrombie, against Crown Point and Ticonderago; and a third, under brigadier-general Forbes, against Fort du Quesne. The fortress of Louisburg, which defended the island of Cape Breton, was very strong both by nature and art; the garrison was numerous, the commander vigilant, and every precaution had been taken to prevent a landing. But the activity of the British surmounted every obstacle, the place was surrendered by capitulation, and its fortifications were demolished. The expedition against Port du Quesne was equally successful; but that against Crown Point once more miscarried. General Abercrombie attacked the French in their entrenchments, was repulsed with great slaughter, and obliged to retire to his camp at Lake George. But though in this respect the British arms were unsuccessful, yet, upon the whole, the campaign of 1758 was greatly in their favour. The taking of Fort du

⁴³⁶ Britain, New combination of the European powers.

⁴³⁷ Unsuccessful expedition against France.

⁴³⁸ British successes in the East Indies.

⁴³⁹ Mr Pitt comes into power.

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Quebec served to remove from their colonies the terror of the incursions of the Indians, while it interrupted the correspondence along a chain of forts with which the French had environed the British settlements in America, so that the succeeding campaign promised great success.

440
Quebec taken and Canada reduced.

In 1759, it was resolved to attack the French in several parts of their empire at once. General Amherst with a body of 12,000 men was commanded to attack Crown Point; General Wolfe was to undertake the siege of Quebec; while general Prideaux and Sir William Johnson were to attempt a French fort near the cataracts of Niagara. This last expedition was the first that succeeded. The siege was begun with vigour, and promised an easy conquest; but general Prideaux was killed in the trenches by the bursting of a mortar, so that the whole command devolved on general Johnson. A body of French troops, sensible of the importance of the place, attempted to relieve it; but were utterly defeated and dispersed; soon after which, the garrison surrendered prisoners of war. On his arrival at the forts of Crown Point and Ticonderago, general Amherst found them deserted and destroyed. There now remained, therefore, but one decisive blow to reduce all North America under the British dominion; and this was by the taking of Quebec* the capital of Canada. This expedition was commanded by admiral Saunders and general Wolfe. The enterprise was attended with difficulties which appeared unsurmountable; but all these difficulties were got over by the conduct of general Wolfe, and the bravery of his men. He engaged and put to flight the French under Montcalm; but, to the great regret of the British, their general was killed in the action. The surrender of Quebec was the consequence of this victory, which was soon followed by the cession of all Canada. The following season, indeed, the French made a vigorous effort to recover the city; but by the resolution of governor Murray, and the appearance of a British fleet under the command of lord Colville, they were obliged to abandon the enterprise. The whole province was soon after reduced by the prudence and activity of general Amherst, who obliged the French army to capitulate, and it has since remained annexed to the British empire. About the same time also the island of Guadaloupe was reduced by commodore More and general Hopson.

441
Duke of Cumberland capitulates with the French.

The British affairs in Germany had at the beginning of the war worn a very unfavourable aspect. The Hanoverians were commanded by the duke of Cumberland, who was greatly outnumbered by the enemy. He was driven beyond the Weser, the passage of which might have been disputed with some appearance of success; but the French were suffered to pass it unmolested. The Hanoverians were driven from one part of the country to another, till at length they made a stand near a village called *Hastenback*, where it was hoped the numbers of the enemy would have the least opportunity of coming to a general engagement. The Hanoverians, however, left the field of battle to the French, after a faint resistance. Their enemies pursued, and the duke retired towards Stade; by which means he marched into a country from whence he could neither procure provisions nor attack the enemy with any hopes of success. Here, being unable either to

escape or advance, he was compelled to sign a capitulation by which the whole army laid down their arms, and were dispersed into different quarters of cantonement. By this remarkable capitulation, which was called the *capitulation of Closter Seven*, Hanover was obliged to submit quietly to the French, who were now determined to turn their arms against the king of Prussia.

Soon after this capitulation, both sides began to complain that the treaty was not strictly observed. The Hanoverians exclaimed against the rapacity of the French general and the brutality of his foldiers. The French retorted the charge against them, accused them of insolence and insurrection; and being sensible of their own superiority, resolved to bind them strictly to their terms of agreement. The Hanoverians only wished for a pretence to take arms, and a general to head them. Neither were long wanting. The oppressions of the tax-gatherers, whom the French had appointed, were considered as so severe, that the army rose to vindicate the freedom of their country, while Ferdinand, prince of Brunswick, put himself at their head. As soon as this was known in Britain, large supplies were granted both for the service of the king of Prussia, and to enable the Hanoverian army to act vigorously in conjunction with him. A small body of British forces was sent over to join prince Ferdinand under the duke of Marlborough. After some inconsiderable successes at Crevelt, the duke of Marlborough dying, the command of the British forces devolved on lord George Sackville. A misunderstanding arose between him and prince Ferdinand, which appeared at the battle of Minden that was fought shortly after. Lord George pretended that he did not understand the orders sent him by the prince, and of consequence did not obey them. The allies gained the victory, which would have been more decisive had the British commander obeyed his orders. He was soon after recalled, tried by a court-martial, found guilty of disobedience, and declared incapable of serving in any military command for the future.

After this victory it was imagined that one reinforcement more of British troops would terminate the war in favour of the allies; and that reinforcement was quickly sent. The British army in Germany was augmented to upwards of 30,000 men, and sanguine hopes of conquest were generally entertained. These hopes, however, were soon found to be ill-founded. The allies were defeated at Corbach; but retrieved their honour at Exdorf. A victory at Warbourg followed shortly after, and another at Zierenberg; but then they suffered a defeat at Compen; after which, both sides retired into winter-quarters.

On the 25th of October 1760, happened the death of king George II. He had risen at his usual hour, and observed to his attendants, that as the weather was fine, he would take a walk into the gardens of Kensington, where he then resided. In a few minutes after his return, being left alone, he was heard to fall down upon the floor. The noise of this bringing his attendants into the room, they lifted him into bed; where he desired with a faint voice, that the princess Amelia might be sent for: but before she could reach the apartment, he expired, in the 77th year of his age and 33d of his reign. An attempt was made to bleed him.

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442
The Hanoverians take up arms.

443
French defeated at Minden.

444
German war continued with various success.

445
Death of king George II.

Britain.

446
Great suc-
cess of the
British
arms.

him, but without effect; and afterwards the surgeons, upon opening him, discovered that the right ventricle of the heart was ruptured, and a great quantity of blood discharged through the aperture.

King George III. ascended the throne amidst the greatest successes both by sea and land. At this time, indeed, the efforts of Britain in every quarter of the globe were truly astonishing. The king of Prussia received a subsidy; a large body of English forces commanded the extensive peninsula of India; another army of 20,000 men confirmed their conquests in North America; 30,000 men were employed in Germany; and a great many more were dispersed in the different garrisons in different parts of the world: but all this was surpassed by the astonishing naval force, which carried command wherever it came, and had totally annihilated the French maritime power. The courage and conduct of the English admirals excelled every thing that had been heard of before; neither superior force, nor number, nor even the terrors of the tempest, could intimidate them. Admiral Hawke gained a complete victory over an equal number of French ships in Quiberon bay on the coast of Bretagne, in the midst of a tempest, during the darkness of night, and, what a seamen fears still more, in the neighbourhood of a rocky shore.

447
Proposals
of peace.

† See Belle-
isle.

As soon as his present majesty had met with his parliament, which was on November 18th 1760, he confirmed the hopes of his allies, and gave assurances of his intentions to prosecute the war with vigour. By this time, however, the people were in some measure weary with conquests; especially with those in Germany, from which they could never hope for any solid advantage, and which were gained at an immense expence to the nation. Disputes concerning the propriety of the German war were carried on, and the general run of popular opinion seemed to be rather against than for it. For some time, however, no change took place in the method of carrying on the war. In 1761 proposals of peace were made between the belligerent powers of Europe; and for this purpose Mr Stanley was sent to Paris, and Mr Bussy to London: but the French, designing to draw Spain into a confederacy with them, seem not to have been sincere in their intentions; and thus the treaty came to nothing. An enterprise was projected against the island of Belleisle, near the coast of France, which was conducted by commodore Keppel and general Hodgson†. The place was conquered, with the loss of 1800 men killed and wounded on the part of the British; and however unimportant this conquest might be, the rejoicings on account of it were great. In Germany, the campaign was unsuccessful on the part of the allies. At first, indeed, they drove the French quite out of the territory of Hesse, and laid siege to the city of Cassel; but being defeated at Stangerod, they were forced to raise the siege, retire behind the Dymel, and again abandon Hesse to their enemies. Here they were followed and attacked by the French; who, though defeated in that attempt, were with difficulty prevented from making themselves masters of Munster and Brunswick.

All this time an appearance of negotiation had been carried on; but at last the French having brought their designs with the court of Spain to a bearing, Mr

Bussy delivered to Mr Pitt a private memorial, signifying, that, in order to establish the peace on a lasting foundation, the king of Spain might be induced to guaranty the treaty; and to prevent the differences which then subsisted between Britain and Spain from producing a fresh war in Europe, he proposed, that in this negotiation, the three points which had been disputed between the crowns of England and Spain might be finally settled. First, the restitution of some captures made upon the Spanish flag. Secondly, the privilege of the Spanish nation to fish upon the banks of Newfoundland. Thirdly, the demolition of the English settlements made in the bay of Honduras. This memorial was returned as wholly inadmissible. Mr Pitt declared, that it would be looked upon as an affront to the dignity of his master, and incompatible with the sincerity of the negotiation, to make any further mention of such a circumstance.

Mr Pitt being now thoroughly convinced of the sinister designs of Spain, proposed immediately to declare war against that kingdom. But this proposal being rejected, he resigned his employment of secretary of state; after which, he was created earl of Chatham, and had a pension of 3000 l. per annum settled upon him for three lives.

Soon after this, however, the new administration found that Mr Pitt was in the right, and war was declared between Great Britain and Spain. As Portugal was an useful ally of Britain, it was resolved by the French and Spaniards to attack that kingdom, which was then in no capacity of defending itself. The Portuguese monarch was by the most haughty memorials commanded to accede to the confederacy against Britain, and threatened with the vengeance of France and Spain in case of a refusal. It was in vain that he promised to observe a strict neutrality, and urged the obligations he was under to the king of Britain; this moderate and reasonable reply only drew on more haughty and insulting answers. His Portuguese majesty, however, continued to reject their proposals in the most resolute manner; and concluded his last declaration with these words, that "it would affect him less, though reduced to the last extremity, of which the great Judge is the sole arbiter, to let the last tile of his palace fall, and to see his faithful subjects spill the last drop of their blood, than to sacrifice, together with the honour of his crown, all that Portugal holds most dear; and to submit, by such extraordinary means, to become an unheard of example to all pacific powers, who will no longer be able to enjoy the benefit of neutrality, whenever a war shall be kindled between other powers with which the former are connected by defensive treaties." This declaration was made on the 27th of April 1762; and soon after, France and Spain jointly declared war against Portugal.

As the design of the courts of France and Spain in making war with Portugal, was professedly to prevent Great Britain from the military and commercial use of the ports of that kingdom, their principal endeavours were aimed at the two great ports where the British used to reside, viz. Oporto and Lisbon. With this view, three inroads were to be made; one to the north; another more to the south; while the third was made in the middle provinces, in order to sustain these two bodies, and preserve a communication between them.

The

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448

Spanish war
proposed by
Mr Pitt.

449

He resigns;
and is crea-
ted earl of
Chatham.

450

War with
Spain.

451

France and
Spain de-
clare war
against
Portugal.

452

Portugal
invaded.

Britain.

The first body of troops was commanded by the marquis of Savria; and entered the north-east angle of Portugal, marching towards Miranda. This town might possibly have retarded their progress, had not a powder-magazine been blown up by accident; and the Spaniards entered on the 9th of May by the breaches made by this explosion. From thence they marched to Braganza, which surrendered six days after Miranda. Moncorvo was taken in like manner; every thing was clear before them to the banks of the Douro; and they became masters of almost the whole extensive province of Tralos Montes. Oporto was given up for lost, and the admiralty prepared transports to carry off the effects of the British merchants. On the banks of the Douro, however, the career of this body was stopped. The peasants, animated and guided by some British officers, seized a difficult pass, and drove the enemy back to Moncorvo.

The second body of Spaniards entered the province of Beira, at the villages called *Val de Mula* and *Val de Coelho*. They were joined by strong detachments amounting to almost the whole army in Tralos Montes; and immediately laid siege to Almeida, the strongest and best provided place on the frontiers of Portugal. This place was defended with sufficient resolution; but, like the rest, was obliged to surrender on the 25th of August. The Spaniards then over-ran the whole territory of Castel Branco, a principal district of the province of Beira, making their way southward until they approached the banks of the Tagus. During the whole of their progress, and indeed during the whole of the campaign, the allied troops of Great Britain and Portugal had nothing that could be called an army in the field, and they could not think of opposing the enemy in a pitched battle. All that could be done was by the defence of passes, skirmish, and surprise.

By this time the count of La Lippe Buckeburg had arrived in Portugal, to the inexpressible joy of the whole nation. The third Spanish army had assembled on the frontiers of Estramadura, with a design to invade the province of Alentejo; and had this body of troops been joined to the others, they would probably, in spite of all opposition, have forced their way to Lisbon itself; had it acted separately, it might have greatly distracted the defendants, so as to enable some other body of forces to penetrate to that city. The count, therefore, resolved to prevent their entrance into the kingdom; and with this view dispatched brigadier-general Burgoyne to attack an advanced body of Spaniards which lay on their frontiers, in a town called *Valentia de Alcantara*. On the 27th of August the town was surprised; the general was taken who intended to have commanded in the invasion, together with one colonel, two captains, and 17 subaltern officers. One of the best regiments in the Spanish service was also entirely destroyed; and thus the enemy were in all probability prevented from entering Alentejo.

That part of the Spanish army which acted in the territory of Castel Branco had made themselves masters of several important passes, which they obliged some bodies of Portuguese to abandon. The combined army of British and Portuguese pretended to retire before them, in order to draw them into the mountainous

tracts. They attacked the rear of the allies, but were repulsed with loss. Still, however, they continued masters of the country, and nothing remained but the passage of the Tagus to enable them to take up their quarters in the province of Alentejo. This the count designed to prevent; and in this service general Burgoyne was employed, who formed a design of surprising them. The execution was committed to colonel Lee, who, in the night of October 6th, fell upon their rear, dispersed the whole body with considerable slaughter, destroyed their magazines, and returned with scarce any loss. The season was now far advanced; immense quantities of rain fell; the roads were destroyed; and the Spaniards, having seized no advanced posts where they could maintain themselves, and being unprovided with magazines for the support of their horse, every where fell back to the frontiers of Spain.

No less successful were the British arms in America and the East Indies. From the French were taken the islands of Martinico, St Lucia, St Vincent, and Granada; from the Spaniards the strong fortresses called *Havannah*, in the island of Cuba. By the acquisition of the first mentioned islands, the British became the sole and undisturbed possessors of all the Caribbees; and held that chain of innumerable islands which forms an immense bow, extending from the eastern point of Hispaniola, almost to the continent of South America. The conquest of the *Havannah* cost a number of brave men; more of whom were destroyed by the climate than the enemy*. It was in this place that the fleets from the several parts of the Spanish West Indies, called the *galleons* and *flota*, assembled, before they finally set out on their voyage for Europe. The acquisition of this place, therefore, united in itself all the advantages which can be acquired in war. It was a military advantage of the highest class: it was equal to the greatest naval victory, by its effect on the enemy's marine; and in the plunder it equalled the produce of a national subsidy. Nine of the enemy's men of war, with four frigates, were taken; three of their capital ships had been sunk in the harbour at the beginning of the siege; two more were on the stocks in great forwardness, and these were destroyed. In money and valuable merchandises, the plunder did not fall short of 3,000,000 l. sterling. To this success in the western part of the world may be added the capture of the Spanish register-ship called the *Hermione*, by the Active and Favourite king's ships. This happened on the 21st of May 1762, just as she was entering one of the ports of Old Spain, and the prize was little short of 1,000,000 l. sterling.

In the East Indies an expedition was undertaken against the Philippine islands, which was committed to colonel Draper, who arrived for this purpose at Madras in the latter end of June 1762. The 79th regiment was the only regular corps that could be spared for this service. Every thing was conducted with the greatest celerity and judgment. The British forces landed on Manilla on the 24th of September; on the 6th of October the governor was obliged to surrender at discretion; and soon after, the galleon bound from Manilla to Acapulco, laden with rich merchandise, the value of more than half a million, was taken by two frigates called the *Argo* and *Panther*. By the conquest

Britain.

454

And by colonel Lee.

455

Havannah, &c. taken.

* See *Havannah*.

456

Immense-plunder found in the place.

457

Capture of the *Hermione*.

458

Philippines reduced.

459

Manilla taken.

of

453
Spaniards
defeated by
General
Burgoyne,

Britain. of Manilla, 14 considerable islands fell into the hands of the British; which from their extent, fertility, and convenience of commerce, furnished the materials of a great kingdom. By this acquisition, joined to our former successes, we secured all the avenues of the Spanish trade, and interrupted all communications between the parts of their vast but unconnected empire. The conquest of the Havannah had cut off in a great measure the intercourse of their wealthy continental colonies with Europe: the reduction of the Philippines excluded them from Asia: and the plunder taken was far more than sufficient to indemnify the charges of the expedition; a circumstance not very common in modern wars. It amounted to upwards of a million and a half; of which the East-India company, on whom the charge of the enterprise in a great measure lay, were by contract to have a third part.

460
Vast extent
of the British
dominions.

All this time the war in Germany had continued with the utmost violence; the allies under prince Ferdinand had continued to give the highest proofs of their valour, but no decisive advantage could be obtained against the French. It was, however, no longer the interest of Britain to continue a destructive war. There never had been a period so fortunate or glorious to this island. In the course of this war she had conquered a tract of continent of immense extent. Her American territory approached to the borders of Asia, and came near to the frontiers of the Russian and Chinese dominions. She had conquered 25 islands, all of them distinguishable for their magnitude, their riches, or the importance of their situation. By sea or land she had gained 12 battles, had reduced nine fortified cities, and near 40 castles and forts. She had taken or destroyed above 100 ships of war from her enemies, and acquired at least L. 10,000,000 in plunder.

461
Articles of
the peace in
1763.

By such unexampled and wide extended conquests, it is no wonder that the French and Spaniards were desirous of a peace; which was at length concluded at Paris on the 10th of February 1763. The terms granted them were by many thought too favourable. The principal of them were, That the French king should relinquish all claims to Nova Scotia; that he should likewise give up all the country of Canada; and that for the future the boundary betwixt the British and French dominions in America should be fixed by a line drawn along the middle of the river Mississippi from its source to the river Ibberville, and from thence drawn by a line along the middle of this river, and the lakes Maurepas and Pontchartrain, to the sea. The islands of St Pierre, Miquelon, Martinico, Guadaloupe, Marigalante, Desirade, St Lucia, and Belleisle, were restored to France: Minorca, Granada, and the Grenadines, St Vincent, Dominica, and Tobago, were ceded to Britain. In Africa, the island of Goree was restored to France; and the river Senegal, with all its forts and dependences, ceded to Great Britain. In the East Indies, all the forts and factories taken from the French were restored. In Europe, the fortifications of Dunkirk were to be destroyed; and all the countries, fortresses, &c. belonging to the electorate of Hanover, the duke of Brunswic, and the count of La Lippe Buckeburg, restored. With regard to Spain, the British fortifications on the bay of Honduras were to be demolished; and the Spaniards were to desist from their claim of a right to

fish on the Newfoundland bank. The Havannah was restored; in consequence of which, Florida, St Augustine, and the bay of Pensacola, were ceded to Britain, and the Spaniards were to make peace with Portugal: all other countries not particularly mentioned were to be restored to their respective owners at the beginning of the war.

The conclusion of the war did not by any means tend to heal those divisions which had arisen on the resignation of Mr Pitt; on the contrary, it furnished abundant matter of complaint for the discontented party, whose views seem at that time only to have been the embarrassment and disturbance of an administration which they were not able to subvert. At the time the treaty was under consideration, however, only some faint attempts were made to oppose it; but it soon appeared, that though this opposition had proved so feeble, the spirit of the party was far from being exhausted. The state of affairs at that time indeed greatly favoured the views of those who delighted in turbulence and faction. A long and expensive war had drained the national treasure, and greatly increased the public debt. Heavy taxes had already been imposed, and it was still as necessary to keep up these, and even to impose new ones, as though the war had not ceased. Thus the bulk of the nation, who imagined that conquest and riches ought to go hand in hand, were easily induced to believe that administration arbitrary and oppressive, which continued to load them with fresh taxes after such great successes as had attended the British arms for some years past.

It must indeed be owned, that the new administration appear not to have been sufficiently wary in this respect. Among other methods of raising the supplies for 1763, they had thought proper to lay a duty of four shillings per hoghead upon cyder, payable by the maker, and to be collected in the same manner as other excises. The other articles of supply furnished also matter of declamation for the members in opposition; but this inflamed the popular fury to a great degree, and made them readily imbibe as truth whatever was thrown out by the minority in their parliamentary debates. Besides the usual declamations, that it was oppressive, unconstitutional, and injurious to the landholder and farmer, the smallness of the sum to be raised by it was now urged. This was said to indicate, that the supplying the wants of government could not be the sole motive for imposing such a duty. It was farther urged, with much show of lamentation, that now the houses of all orders of people, noblemen of the first rank not excepted, were liable to be entered and searched at the pleasure of excisemen, a proceeding which they denominated in express terms "a badge of slavery." Thus it was spoken of throughout all the cyder counties, by the city of London, and by most of the incorporations throughout the kingdom. The city had been displeased by the late changes in administration, and had not yet recovered their good humour. They instructed their representatives to oppose the passing of the bill with all possible vigour, and gave in petitions against it to every branch of the legislature; a measure till that time totally unprecedented; two protests were also entered against it in the house of lords; and in short the kingdom of England was thrown into an almost universal ferment.

462
Discontents
increased on
the conclusion
of this
treaty.

463
Great clamour
raised
by the cyder-tax.

Britain.

It is not to be doubted that the friends of administration were able to bring arguments sufficiently plausible in favour of their scheme; but the utmost force of reason will go but a very little way in quieting popular clamour; and while opposition was railing against ministry within doors, every method was taken to excite the fury of the people without. Virulent libels, the audacity of which far exceeded any thing known in former times, now made their appearance; and such was the general intemperance in this respect, that it would be difficult to determine which side paid least regard to any kind of decency or decorum.

464
Resignation of the earl of Bute.

In the midst of this general ferment the earl of Bute unexpectedly resigned his place of first lord of the treasury. His resignation quickly became an object of general speculation; by some he was highly censured for leaving his friends at the time when a little perseverance might have defeated all the designs of his enemies, and established his own power on the most solid foundation. Such conduct, they said, must discourage the friends of government, and at the same time give proportionable encouragement to its adversaries to insult it, as they perceived ministry unable to resist the first gust of popular fury. Others contended, that the earl was, perhaps, the least influenced by popular opinion of any man in the world. He had demonstrated his firmness by taking a lead in the dangerous but necessary affair of concluding peace; and, this being accomplished, he had fully obtained his end, and performed the service to his country which was desired. He now resolved that the factious party should not have even the pretence of objecting his personal ambition as the cause of disturbances which they themselves had excited; and thus his resignation would tend to put an end to these troubles, at the same time that it showed the authors of them in their proper colours.

465
Popular ferment still continues.

The event, however, showed that the former reasoning was, in the present case, nearest the truth. The popular resentment was not in the least abated by the resignation. His lordship, though now withdrawn from the ostensible administration of affairs, was still considered as principal director of the cabinet; and this opinion gained the more ground that none of the popular leaders were yet taken in, nor any apparent change made in the conduct of the new administration.

466
Characters of the new ministers.

No reasonable objection could now be made to those who filled the great offices of state. Mr Grenville, who succeeded the earl of Bute in the treasury, was a man of approved integrity, understanding, and experience. Lord Holland was universally considered as a very able man in office; and had already filled many high employments with a great degree of reputation. The other secretary lord Egremont, though he had not been long in office, was in every respect of an unexceptionable character. The other departments were filled in a similar manner, yet the discontents and public clamours were not diminished. It was now said that the new ministers were not chosen on account of any superior gifts of nature or fortune, but merely because they had the art of insinuating themselves into favour at court in such a manner that any inconvenience would be submitted to rather than part with them. The sole reason of their appointment therefore was, that they

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might act as the passive instruments of the late minister, who though, from considerations of his own personal safety, he had thought proper to retire from business, yet had not abandoned his ambitious projects, but continued to direct every thing as though he had still been present. Opposition to the new ministers was therefore opposition to him; and it became those who understood the true interest of their country, and had a real regard for it, not to suffer such a scheme of clandestine administration.

Britain.

467
Lord Bute supposed still to be at the head of administration.

Whether the party who made these assertions really believed them or not cannot be known; but the effect was exactly the same as though they had. The great object of both parties most probably was power; but their different situations required that they should profess different political principles. The friends of lord Bute and of the succeeding administration were for preserving to the crown the full exercise of a power which could not be disputed, viz. that of choosing its own servants. Their opponents, without denying this power, contended, that, according to the spirit of the constitution, the crown should be directed to the exercise of this public duty only by motives of national utility, and not by private friendship. In appointing the officers of state, therefore, they insisted, that respect should be paid to those possessed of great talents, who had done eminent services to the nation, enjoyed the confidence of the nobility, and had influence amongst the landed and mercantile interests. The observance of this rule, they contended, was the only proper balance which could be had against the enormous influence of the crown arising from the disposal of so many places; nor could the nation be reconciled to this power by any other means than a very popular use of it. Men might indeed be appointed according to the strict letter of the law; but unless these were men in whom the majority of the nation already put confidence, they never would be satisfied, nor think themselves secure against attempts on the constitution of the kingdom. When ministers also found themselves recommended to the royal favour, and as it were presented to their places by the esteem of the people, they would be studious to deserve and secure themselves in it; and upon these (which they called the principles of whigs) they said that the government had been honourably conducted since the revolution, and the nation would never be at peace till they were again established on the same basis.

468
Different political principles of the two parties.

In the mean time the disposition to libel and invective seemed to have gone beyond all bounds. The peace, the Scots, and Scottified administration, afforded such subjects of abuse to the pretended patriots, that ministry resolved at last to make an example of one of them by way of deterring the rest from such licentiousness. For this purpose the paper called the North Britain was made choice of, which, in language much superior to any other political work of the time, had abused the king, the ministry, and the Scots in an extravagant manner. One particular paper (N^o XLV.) was deemed by those in power to be actionable, and Mr Wilkes, member of parliament for Aylesbury, was supposed to be the author. A warrant was therefore granted for apprehending the author, publishers, &c. of this performance, but without mentioning Wilkes's name. In consequence of this, however, three

469
Mr Wilkes apprehended on a general warrant.

4 N

messengers

Britain.

messengers entered his house on the night between the 29th and 30th of April 1763, with an intention to seize him. He objected, however, to the legality of the warrant, because his name was not mentioned in it, and likewise to the lateness of the hour; and on threatening the messengers with violence, they thought proper to retire for that night. Next morning he was apprehended without making any resistance, though some violence was necessary to get him into an hackney coach, which carried him before the secretaries of state for examination.

470
Illegal pro-
ceedings a-
gainst him.

On the first intimation of Mr Wilkes being in custody, application was made for an *habeas corpus*; but as this could not be sued out till four in the afternoon, several of his friends desired admittance to him, which was peremptorily refused on pretence of an order from the secretaries of state. This order, however, though repeatedly demanded, could not be produced, or at least was not so; on which account the gentlemen, conceiving that they were not obliged to pay any regard to messengers acting only by a verbal commission, entered the place where he was without farther question.

472
He is com-
mitted to
the Tower.

This illegal step was quickly followed by several others. Mr Wilkes's house was searched, and his papers seized in his absence; and though it was certain that an *habeas corpus* was now obtained, he was nevertheless committed to the Tower. Here not only his friends, but even several noblemen and gentlemen of the first distinction, were denied access, nor was his own brother allowed to see him more than others. On the third day of May he was brought before the court of common pleas, where he made a most patriotic speech, setting forth the love he had for his majesty, the bad conduct of ministry, not forgetting his own particular grievances, and that he had been treated "worse than a Scotch rebel." His case being learnedly argued by several eminent lawyers, he was remanded to the Tower for three days; after which he was ordered to be brought up, that the affair might be finally settled.

472
Deprived
of his com-
mission as
colonel of
the Buck-
ingham-
shire mili-
tia.

Next day lord Temple received a letter from secretary Egremont, informing him, that the king judged it improper that Mr Wilkes should continue any longer a colonel of the Buckinghamshire militia; and, soon after, Temple himself was removed from being lord lieutenant of that county. Mr Wilkes then being brought to Westminster hall at the time appointed, made another flaming speech; after which the judges took his case into consideration. Their opinion was, that the warrant of a secretary of state was in no respect superior to that of a common justice of peace; and, on the whole, that Mr Wilkes's commitment was illegal. It was likewise determined that his privilege as member of parliament was infringed: this could not be forfeited but by treason, felony, or breach of the peace; none of which was imputed to him; for a libel, even though it had been proved, had only a tendency to disturb the peace, without any actual breach of it. Thus it was resolved to discharge him; but, before he quitted the court, a gentleman of eminence in the profession of the law stood up and acquainted the judges, that he had just received a note from the attorney and solicitor general, intreating his lordship not to give Mr Wilkes leave to depart till they came, which would be instantly, as they had

473
Is dischar-
ged, and his
commit-
ment de-
clared il-
legal.

something to offer against his plea of privilege. This motion, however, being rejected, the prisoner was set at liberty.

Mr Wilkes had no sooner regained his freedom than he showed himself resolved to make all the advantage of the errors committed by the ministry, general animosity a-
and to excite as general a ferment as possible. For gainst ad-
this purpose he wrote a very impudent letter to the minis-
earls of Egremont and Halifax, informing them, that tra-
his house had been robbed, and that the *stolen goods*
were in the possession of one or both of their lordships, insisting upon immediate restitution. This letter was printed, and many thousand copies of it dispersed; soon after which an answer by the two noblemen was published in the newspapers, in which they informed him of the true cause of the seizure of his papers, that his majesty had ordered him to be prosecuted by the attorney general, and that such of his papers as did not lead to a proof of his guilt should be restored. This was quickly succeeded by a reply, but the correspondence ceased on the part of their lordships. Mr Wilkes, however, erected a printing press in his own house, where he advertised the proceedings of the administration with all the original papers, at the price of a guinea. The North Britain now again made its appearance; the popular party were elated beyond measure with their success; those who had suffered by general warrants sought redress at law, and commonly obtained damages far beyond not only their real sufferings, but even beyond their most sanguine expectations. During the whole summer, the minds of the people were kept in continual agitation by political pamphlets and libels of various kinds, while the affair of general warrants so engrossed the general attention, that by the time the parliament sat down, November 15th 1763, scarce any other subject of conversation could be started in company.

On the meeting of parliament his majesty mentioned in his speech the attempts that had been made to divide the people; and before the addresses could be made in return, a message was sent to the commons, informing them of the supposed offence of Mr Wilkes, and of the proceedings against him, the exceptionable paper being also laid before the house. After warm debates, the North Britain was deemed a false, scandalous, and seditious libel, tending to excite traitorous insurrections, &c. This was followed by another, that the privilege of parliament does not extend to the writing and publishing of seditious libels, nor ought to obstruct the ordinary course of the laws in the speedy and effectual prosecution of so heinous and dangerous an offence. It did not, however, pass the house of commons without a vigorous opposition, and seventeen members of the upper house protested against it.

The North Briton N° XLV. being condemned as already mentioned, was ordered to be burnt by the hangman; but this could not be done without great opposition from the mob. The executioner, constables, officers, and even the chief persons concerned, were pelted with filth and dirt, and some of them insulted in the grossest manner. Mr Harley, one of the sheriffs and member of parliament for London, was wounded by a billet taken from the fire; the staves of the constables were broken; and the whole officers and executioner driven off the field, while the remains of the

474
Endeavours
to raise a
general ani-
mosity a-
gainst ad-
ministra-
tion.

475
Proceed-
ings against
him in par-
liament.

476
Disturban-
ces on burn-
ing the
North Bri-
ton.

Britain.

the paper were carried off in triumph from the flames, and in return, a large jack-boot was burnt at Temple-bar, while the half-burnt North Briton was displayed amidst the acclamations of the populace.

477
The under
secretary
fined for
seizing Mr
Wilkes's
papers.

Mr Wilkes, in the mean time, determined to make the best use of the victory he had already gained, and therefore commenced a prosecution in the court of common pleas against Robert Wood, Esq; the under secretary of state, for seizing his papers. The cause was determined in his favour, and Wood condemned in 1000 l. damages, with full costs of suit.

478
Mr Wilkes
prosecuted,
wounded in
a duel, and
outlawed.

The prosecution with which Mr Wilkes had been threatened was now carried on with great vigour; but in the mean time, having grossly affronted Samuel Martin, Esq; member for Camelford, by his abusive language in the North Briton, he was by that gentleman challenged, and dangerously wounded in the belly with a pistol bullet.—While he lay ill of his wound, the house of commons put off his trial from time to time; but beginning at last to suspect that there was some collusion betwixt him and his physician, they enjoined Dr Heberden, and Mr Hawkins an eminent surgeon, to attend him, and report his case. Mr Wilkes, however, did not think proper to admit a visit from these gentlemen; but soon after took a journey to France to visit his daughter, who, as he gave out, lay dangerously ill at Paris.

The commons having now lost all patience, and being certified that he had refused to admit the physician and surgeon sent by them, proceeded against him in his absence. The evidence appearing quite satisfactory, he was expelled the house, and a prosecution afterwards commenced against him before the house of lords, on account of an obscene and blasphemous pamphlet, in which he had mentioned a reverend and learned bishop in a most shameful manner. The event of all was, that, failing to appear to answer the charges against him, he was outlawed, which, it was then supposed, would for ever consign his patriotism to oblivion.

479
A general
spirit of li-
centiousness
still pre-
vails.

The extreme severity shown to Mr Wilkes did not at all extinguish the spirit of the party. A general infatuation in favour of licentious and abusive writings seemed to have taken place; and to publish libels of this kind without the least regard to truth or justice was called *liberty*. At the very time that Mr Wilkes was found guilty of publishing the infamous pamphlet above mentioned, the common council of London presented their thanks to the city representatives for their zealous and spirited endeavours to assert the rights and liberties of the subject, "by their laudable attempt to obtain a seasonable and parliamentary declaration, That a general warrant for apprehending and seizing the authors, printers, and publishers of a seditious libel, together with their papers, is not warranted by law." Their gratitude they showed to lord chief justice Pratt, for his decision in Wilkes's affair, by presenting him with the freedom of the city, and desiring him to sit for his picture to be placed in Guildhall. These extravagant proceedings, however, did not pass without strong opposition, and were considered by the sober part as highly unjust and improper, as well as indecent.

The violent clamours which had been excited and still continued, though in a less violent degree, did not prevent administration from paying that attention to

the exigencies of the nation which its present situation undoubtedly required. The practice of franking blank covers to go free *per post* to any part of Great Britain or Ireland, had arisen to an incredible height, and greatly prejudiced the revenue. The hands of members of parliament were not only counterfeited, but the covers publicly sold without the least scruple; and besides this, the clerks of the post office claimed a privilege of franking, which extended even farther than that of the members of the house; the latter being restricted to a certain weight, but the former denying that they were subject to any restriction of this kind. The matter, however, was attended with considerable difficulty when it came to be examined in the house of commons. It was found, that though the vast increase of franks was detrimental to one branch of the revenue, it was serviceable to another by the immense consumption of stamps it occasioned; but at last the following act was passed as an effectual remedy, viz. That from the 1st of May 1764, no letters or packets should be exempted from postage, except such as were sent to or from the king; or such as, not exceeding two ounces in weight, should be signed by a member of either house, the whole of the superscription being in his own hand-writing; or such as should be directed to members of parliament, or other persons specified in the act. It was likewise enacted, that printed votes and proceedings in parliament, sent without covers, or in covers open at the sides, and only signed on the outside by a member, should go free, though such packets were liable to be searched; and to give the greater force to these regulations, it was made felony and transportation for seven years to forge a frank. At this time it was proved, that the annual postage of letters sent free would amount to 70,000 l. and that the profits accruing to the clerks of the post office amounted to between 800 l. and 1700 l. each.

Britain.

480
Abuse of
franking
letters cor-
rected.

Other plans for augmenting the revenue were that for settling the island of St John, and for the sale of the lately acquired American islands. The former was proposed by the earl of Egremont, who presented a memorial to his majesty on the subject. In this he demanded a grant of the whole island of St John's, in the gulf of St Lawrence, to hold the same in fee of the crown for ever; specifying particularly the various divisions, government, &c.; but, for reasons unknown, the plan was never put in execution. The sale of the conquered lands took place in March 1764. These were particularly the islands of Grenada, the Grenadines, Dominica, St Vincent, and Tobago. Sixpence an acre was to be paid as a quit rent for cleared lands, and a penny a foot for ground-rent of tenements in towns, and sixpence an acre for fields; but no person was to purchase more than 300 acres in Dominica, or 500 in the other islands.

481
Plan for set-
tling the
island of St
John, and
selling the
conquered
lands.

One of the most remarkable transactions of this year was the renewal of the charter of the bank, for which the latter paid the sum of 1,100,000 l. into the exchequer as a present to the public, besides the advancing a million to government upon exchequer bills. Another, and, by its consequences, still more momentous affair, however, was the consideration of methods to raise a revenue upon the American colonies. This had been formerly proposed to Sir Robert Walpole; but that prudent minister wisely declined to enter into

482
Renewal
of the char-
ter of the
bank.

483
Taxation of
America.

Britain.

such a dangerous affair, saying, that he would leave the taxation of the colonies to those who came after him in office. The reason given for such a proceeding was the defraying the necessary charges of defending them; which though extremely reasonable in itself, was done in such a manner as excited a flame not to be extinguished but by a total loss of the authority of the parent state. Before this time, indeed, hints had been thrown out, that it was not impossible for the colonists to withdraw their dependence on Britain; and some disputes had taken place betwixt the different provinces, which were quieted only by the fear of the French, and seemed to prognosticate no good. It was thought proper therefore now, when the colonies were not only secured but extended, to make the experiment whether they would be obedient or not. They contained more than two millions of people, and it was evidently necessary to raise a revenue from such a numerous body. Some thought it might be dangerous to provoke them; but to this it was replied by administration, that the danger must increase by forbearance; and as taxation was indispensable, the sooner the experiment was made the better. The fatal trial being thus determined, an act was passed for preventing smuggling, so that the duties laid on the American trade might come into the hands of government. At this time an illicit trade was carried on betwixt the British and Spanish colonies, which seemed to bid defiance to all law and regulation; and was no less disagreeable to the Spanish than to the British court. In some respects, however, the suppression of this was very inconvenient, and even intolerable to the colonists; for as the balance of trade with Britain was against them, it was impossible they could procure any specie except by trading with the Spaniards, from whom they were paid for their goods in gold and silver. This, and another act requiring them to pay certain duties in cash, was probably the reason of that excessive resentment shown by the Americans to government, and their absolute refusal to submit to the stamp-act which was also passed this year.

484
Act against
illicit trade
with the
Spaniards.

485
Stamp act
passed.

486
Isle of Man
purchased
by govern-
ment.

487
A general
animosity
against go-
vernment
both in Bri-
tain and A-
merica.

The augmentation of the revenue being the principal object of administration at this time, the suppression of smuggling at home, as well as in America, was taken into consideration. Though the great number of cutters and other vessels fitted out by government for this purpose had produced very salutary effects, the isle of Man, which belonged to the duke of Athol, and was not subject to the custom-house laws, lay so conveniently for the purposes of smuggling, that the utmost vigilance of government was not sufficient to suppress it. The event was a treaty betwixt government and the duke, by which the latter, for a sum of money, ceded all the sovereignty in the island he could claim, and cutters were placed on the coasts and in the harbours of the island as in other places of the kingdom. This disposition to augment the revenue by all possible methods, seems to have served to keep up the general opinion of the oppressive and arbitrary measures about to be pursued by government. The ill humour of the British patriots still continued; and the stamp bills were received in America with the utmost indignation. The arguments for and against American taxation are now of no importance; and the particulars of their opposition are related under the article *United States of AMERICA*. Here we shall only take

notice, that the opposition of the colonists proved very distressing to the mother country, on account of the vast sums they owed. At this time they were indebted to the merchants of London four millions Sterling; and so ready were the latter to give them credit, that some of the American legislatures passed acts against incurring such credit for the future. A petition on the subject was presented to the house of commons; but as it denied the parliamentary right of taxation, it was not allowed to be read. It was then proposed, on the part of administration, that the agents should join in a petition to the house for their being heard by counsel in behalf of their respective colonies against the tax. The agents, however, not thinking themselves empowered to grant such a petition, the negotiation was broken off, and matters went on in America as we have elsewhere related.

In other respects, the ministry took such steps as were undeniably proper for supporting the honour and dignity of the nation. Some encroachments having been made by the French and Spaniards, such remonstrances were made to their respective courts, that satisfaction was quickly made; and though every trifle was sufficient to open the mouths of the popular party, it was impossible as yet to find any just cause of complaint. The disposition to tumult and insurrection, however, seems to have been now very general. The silk-weavers residing in Spitalfields being distressed for want of employment, which they supposed to proceed from the clandestine importation of French silks, laid their case before his majesty in the year 1764, who graciously promised them relief. The sufferers were relieved by the bounty of the public; but this seemed to render the matter worse, by confirming them in habits of indolence and idleness. At the same time, a bill, which was supposed to tend to their relief, being thrown out, they began to assemble in vast numbers, which, gradually increasing, are said to have amounted at last to 50,000; several disorders were committed, and it was not without the assistance of the soldiery, and the utmost vigilance of the magistrates, that the riot could be suppressed.

During this insurrection, the ferment betwixt the court and popular parties continued with unabated vigour. The ministers were still attacked in numberless publications, and accused as being merely dependents and substitutes to the earl of Bute; nor could the utmost care on the part either of that nobleman or the ministers blunt the shafts of calumny and misrepresentation. An accident, however, now produced a considerable revolution at court, though it had very little effect in calming the minds of the people. This was an illness with which the king was seized in the beginning of the year, which filled the public with apprehensions, and produced a bill for settling the affairs of the kingdom in case of the crown falling into the hands of a minor. In settling this bill, ministers were said to have behaved with very little respect to the princess-dowager of Wales, and industriously to have excluded her from a share of the government. These proceedings were thought in a great measure to have alienated the affection of his majesty from the ministry, who had hitherto been in great favour: Nor did their subsequent conduct show them to be at all desirous of regaining what they had lost. They now contrived to

Britain.

488

Vigorous
conduct of
administra-
tion.

489

Insurrec-
tion of the
Spitalfield
weavers.

490

Illness of
the king
and regen-
cy bill.

491

Change of
ministry.

have

Britain.

have the earl of Bute's brother turned out of a very lucrative post which he enjoyed in Scotland, and in which he had never given the least cause of complaint. A step of this kind could not be agreeable to his majesty, nor could it recommend them to the popular party in England, who always manifested a perfect indifference as to what passed in Scotland. On this occasion lord Chatham is said to have been solicited again to accept the office which he had formerly filled so much to the satisfaction of the nation, and to have declined it.

492
New mini-
sters recom-
mended by
the duke of
Cumber-
land.

A new ministry, however, was soon formed, at the recommendation of the duke of Cumberland. The duke of Grafton and the honourable Mr Conway, brother to the earl of Hertford, were appointed secretaries of state, the marquis of Rockingham first lord of the exchequer, and Mr Dowdeswell chancellor and under treasurer of the exchequer. The office of lord privy seal was conferred on the duke of Newcastle, and all other places were filled with men not only of known integrity, but such as were agreeable to the people.

493
The cla-
mour a-
gainst lord
Bute still
kept up.

These changes, however, were not yet able to give satisfaction. The opinion that affairs were still managed by the earl of Bute continued to prevail, and was industriously kept up by the political writers of the time. The city of London expressed their discontent on the occasion of addressing his majesty on the birth of a third son. They now took the opportunity of assuring him of "their faithful attachment to his royal house; and the true honour of his crown, *whenever a happy establishment of public measures should present a favourable occasion*; and that they would be ready to exert their utmost abilities in support of such wise councils as apparently tended to render his majesty's reign happy and glorious."

494
Death of
his royal
highness
the duke of
Cumber-
land.

These expressions showed such an evident disapprobation of his majesty's choice, that it could not fail to offend both king and ministry; but before the latter could show any token of resentment, they lost their great friend and patron the duke of Cumberland. His death happened on the 31st of October 1765. He had been that evening assisting at one of those councils frequently held in order to put matters in a way of being more speedily dispatched by the privy council; where being seized with a sudden disorder of which he had some symptoms the evening before, he fell senseless in the arms of the earl of Albemarle, and expired almost instantaneously. His death was greatly lamented, not only by their majesties, but by the whole nation, being universally esteemed not only as a brave commander, but an excellent member of society, an encourager of industry, and an active promoter of the arts of peace.

495
Arguments
for and a-
gainst the
stamp act.

In the mean time, the discontents which inflamed the American colonies continued also to agitate the minds of the people of Great Britain; nor indeed was it reasonable to expect that they could be satisfied in their present condition; commerce being almost entirely destroyed, manufactures at a stand, and provisions extravagantly dear. The vast sums owing to the British merchants by the Americans also severely affected the trading and manufacturing part of the country. These amounting to several millions, the colonists absolutely refused to pay unless the obnoxious laws should be repealed. Administration were therefore under the necessity of instantly enforcing the stamp act by fire and sword, or of procuring its imme-

mediate repeal in parliament. The loss of the duke of Cumberland was now severely felt, as he had been accustomed to assist administration with his advice, and was highly respected by the nation for his good sense. At this period, however, it is doubtful if human wisdom could have prevented the consequences which ensued. Administration endeavoured, as much as perhaps was possible, to avoid the two extremes, either of rushing instantly into a civil war, or of sacrificing the dignity of the crown or nation by irresolution or weakness. They suspended their opinion until they should receive certain intelligence from the American governors how affairs stood in that country; and their letters on that occasion still do them honour. The opposite party animadverted severely on this conduct. They insisted on having the most coercive methods immediately put in execution for enforcing the laws in which they themselves had so great a share; and it is probable that they wished matters to come to extremities before the sitting down of parliament. Pacific measures, however, at this time prevailed: the stamp act was repealed; but at the same time another was made, declaring the right of parliament not only to tax the colonies, but to bind them in all cases whatever.

496
It is repeal-
ed.

The repeal of the stamp act occasioned universal joy both in Britain and America, though, as parliament insisted upon their right of taxation, which the opposite party denied, matters were still as far from any real accommodation as ever. This ill humour of the Americans was soon after augmented by the duties laid upon glass, painters colours, and tea, imported into their country, while at home the dearness of provisions, and some improper steps taken by ministry to remedy the evil, kept up the general outcry against them. A general disposition to tumult and riot still continued; and unhappily the civil power now seemed to lose its force, and a general anarchy, under the name of liberty, to be approaching.

497
Tranquilli-
ty is not re-
stored by its
repeal.

In this state of affairs administration were once more disturbed by the appearance of Mr Wilkes, who had returned from his exile, and on the dissolution of parliament in 1768, though an outlaw, stood candidate for the city of London. He was received by the populace with loud acclamations, and several merchants and people of large property espoused his cause, and a subscription was entered into for the payment of his debts. He failed, however, in his design of representing the city of London, but instantly declared himself a candidate for Middlesex. The tumults and riots which now took place were innumerable; and such was the animosity betwixt the two parties, that a civil war seemed to be threatened. Our limits will not allow of any particular detail of these transactions. It will be sufficient to take notice, that on a legal trial the outlawry of Mr Wilkes was reversed, and he was condemned for his offences to pay a fine of L. 1000, and to be imprisoned for twelve months. Being idolized by the people, however, and powerfully supported, he was repeatedly chosen member for Middlesex, and as often rejected by the house of commons. The tumults on this occasion were not always ended without bloodshed; and the interposition of the military was construed by the patriots as an indication of a design to establish ministerial authority by the most barbarous methods. In short the behaviour of the people of England and America was at this time so very much alike, that both

498
Return of
Mr Wilkes,
his election.

Britain. both seemed to be actuated by one spirit, and the rage of the English patriots undoubtedly contributed to confirm the colonists in their disobedience.

499
Difference
with Spain
concerning
Falkland's
islands.

* See Falk-
land's
islands.

500
An English
settlement
formerly
proposed
on these
islands.

501
A French
colony set-
tles there.

502
They aban-
don it to the
Spaniards.

The dissensions which had so long prevailed in the kingdom did not pass unnoticed by the other European powers, particularly the French and Spaniards. Both had applied themselves with assiduity to the increase of their marine; and many began to prognosticate an attack from one or other or both of these nations. The Spaniards first showed an inclination to come to a rupture with Britain. The subject in dispute was a settlement formed on Falkland's islands*, near the southern extremity of the American continent. A scheme of this kind had been thought of as early as the reign of Charles II. but it was not till after lord Anson's voyage that much attention had been paid to it. In the printed account of it, his lordship showed the danger incurred by our navigators through the treachery of the Portuguese in Brasil; and that it was a matter of the greatest importance to discover some place more to the southward, where ships might be supplied with necessaries for their voyage round Cape Horn; and, among others, he pointed out Falkland's islands as eligible for this purpose. When at the head of the admiralty his lordship also forwarded the scheme as much as possible; and some preparations were made for putting it in execution: but as it met with opposition at home, and gave offence to the court of Madrid, it was laid aside till the year 1764, when it was revived by lord Egmont. Commodore Byron being then sent out with proper necessaries, took possession of them in the name of his majesty, and represented them in a favourable light; while his successor, captain M'Bride, affirmed, that the soil was utterly incapable of cultivation, and the climate intolerable.

Be this as it will, the islands in question had attracted also the notice of the French. So low, however, had the nation been reduced by the late war, that no project of the kind could yet be put in execution at the public expence. M. Bougainville, therefore, with the assistance of his friends, undertook to form a settlement on Falkland's islands at their own risk. The scheme was put in execution in the beginning of the year 1764; and a settlement formed on the eastern part of the same island where commodore Byron had established an English colony on the western side. His account of the country was still more favourable than that of the English commander; but as the project had been undertaken with a view to other discoveries and advantages, which probably did not turn out according to expectation, the French adventurers soon became weary of their new colony; to which also the displeasure of the Spaniards, who were greatly offended, did not a little contribute. M. Bougainville, therefore, being reimbursed in his expences, and the French having given up every claim of discovery or right of possession, the Spaniards landed some troops in 1766, took possession of the fort built by the French, and changed the name of the harbour from Port Louis to Port Solidad.

In the year 1769, captain Hunt of the Tamar frigate, happening to be on a cruise off Falkland's islands, fell in with a Spanish schooner which had been at Port Solidad. During all this time, it is uncertain whether the British and Spanish settlers knew of one

another or not. From the behaviour of captain Hunt we should suppose that they did not; as he charged the commander of the schooner to depart from that coast, being the property of his Britannic majesty. The schooner, however, soon returned, bringing an officer from the governor of Buenos Ayres, who gave the like warning to captain Hunt to depart from the coast, as belonging to the king of Spain. Some altercation ensued; but captain Hunt, not choosing to carry matters to extremities, set sail for England, where he arrived in June 1770.

At the departure of captain Hunt, two frigates were left at Falkland's islands. One of these was lost in a short time after; and on the fourth of June 1770, a Spanish frigate arrived at the English settlement named *Fort Egmont*, with a number of guns and other warlike utensils for carrying on a regular siege. In three days, four other frigates arrived, laden in the same manner; so that the English commander, captain Farmer, finding all resistance vain, was obliged to capitulate. The English were ordered to depart within a limited time, carrying with them what stores they could; and the Spanish commander declared himself answerable for what they should leave on the island. The time allowed them to remain at Port Egmont was to be determined by the governor; and for the greater security, the rudder was taken off from captain Farmer's ship, and kept on shore till the appointed period; after which the frigate was permitted to depart, and in 70 days arrived at Portsmouth.

An insult to the British flag, so audacious, seemed to render war inevitable unless proper reparation was very speedily made. It was accordingly mentioned in the speech from the throne, November 13th 1770; and an immediate demand of satisfaction for the injury was promised, and that the necessary preparations for war, which had been begun, should not be discontinued. The affairs of America were also taken notice of, where grounds of complaint still existed, notwithstanding the cessation of those combinations which had distressed the commerce of this country. These promises, with regard to the affairs of Falkland's islands, however, were far from giving general satisfaction. The speech, as the work of ministry, was most violently attacked by opposition; and an address in answer to it, it was said, would be an eulogium on ministers who did not deserve it. News had arrived, they said, from Falkland's islands in June, which sufficiently demonstrated the designs of Spain; and Gibraltar and Minorca were left open to the attacks of that power, without any preparation being made on our part to resist them. The whole conduct of the ministry was said to be pusillanimous; and the love of peace, which was given out as the reason of their unwillingness to resent the injury, was treated with contempt.

A motion was now made in both houses for an inquiry into the conduct of the Spaniards on this occasion, and that all the papers and letters relative to it should be laid before parliament. The demand, however, was opposed by ministry, who insisted that the laws of negotiation precluded the idea of exposing any letters or papers sent in confidence while the negotiation was depending; and they asserted that the king of Spain had disavowed the conduct of his officer, and promised satisfaction. It would have been rash, they said,

Britain.

503
The Spa-
niards ob-
lige the
British to
leave the
islands.

504
Parliamen-
tary trans-
actions re-
lating to
this affair.

Britain. said, to proceed to extremities betwixt the two crowns, when perhaps the officer only was to blame; but if, after remonstrance, the court of Spain refused satisfaction, we were then authorised to force that justice which was refused in an amicable manner.

505
Negotia-
tions with
the Spanish
ambassador.

Some time before this, Mr Harris, the English minister at the court of Madrid, dispatched a letter to lord Weymouth, informing him that a ship had arrived from Buenos Ayres with an account of the intended expedition against Port Egmont, the number of men to be employed, and the time fixed for its departure; at the same time that it was asserted by prince Masferans, the Spanish ambassador, that he had every reason to believe that the governor of Buenos Ayres had employed force at Port Egmont without any orders; and hoped that, by disavowing this proceeding, he might prevent any misunderstanding betwixt the two kingdoms. To this his lordship replied in a spirited manner, asking, among other things, Whether the prince had any orders to disavow the proceedings of the governor? And, on his reply in the negative, a formal disavowal was demanded. After some time, his lordship was informed that the prince had orders to disavow any particular orders given to Mr Bucarelli, the governor of Buenos Ayres, and at the same time to say, that he had acted agreeably to his general instructions and oath as governor; that the island should be restored; and that it was expected the king of Britain would, on his part, disavow the conduct of captain Hunt, whose menace had induced the governor to act as he did.

This reply did not by any means prove agreeable; and soon after the conduct of the court of Spain became so suspicious, that Mr Harris was ordered to quit the court of Madrid; and the correspondence between prince Masferans and the court of England was no longer continued. About this time lord Weymouth resigned his office, and was succeeded by the earl of Rochford; and the affair of Falkland's islands was no longer openly spoken of. On the sitting down of the parliament, January 22d 1771, however, it was again brought before the house, and the declaration of the Spanish ambassador, with Rochford's acceptance, were announced. Prince Masferans then disavowed, in the name of his master, the violence used at Port Egmont; to the restitution of which he agreed, and hoped that this restitution would be looked upon as ample satisfaction, and at the same time as not affecting the question concerning the prior sovereignty of the islands. This produced a new demand for copies of all papers, letters, and declarations of every kind relative to Falkland's islands: but though it was now seemingly complied with, the opposite party affirmed that it was still only in part; for besides a chasm of near two months, during which time there was no account whatever, none of the copies of the claims or representations made by the court of Spain since the first settlement of the islands were given up. Thus a suspicion was produced, that the concealment of these papers, and the deficiencies in the order of their dates, might proceed from some misconduct during the periods in question; and which administration was willing to conceal from the world. To these objections it was replied, that every paper which could be found in the several offices had been presented; and that if there had been any correspondence between the two courts, of which no

notice was taken in them, it must have been verbal; but, at any rate, there were papers sufficient to enable the house to determine the propriety or impropriety of their conduct throughout the whole transaction; for every thing decisive or explicit was in writing, and every writing was laid before them.

All these excuses, however, could not yet satisfy opposition. It was reported, and generally believed, that France had interposed in the affair; in consequence of which, a motion was made to address his majesty for information whether any such interference had taken place, and of what nature it was, or in what manner it had been conducted. The minister denied that there had been any such interference; but it was insisted that this was insufficient; that the word of the king was requisite, as that of the minister could not be satisfactory, even supposing him to be upright. It did not, however, appear that any correspondence in writing had taken place betwixt the two courts; and when the minister was asked, whether France had ever interposed as mediator? he answered, that England "had not employed France in that capacity; but that the word *interposed* was of a meaning too vague for direct explanation; and it was unusual to demand verbal negotiations, while papers were laid before them: That as all Europe had an eye to the compromising of differences betwixt states, it was not to be supposed that France would be altogether silent; but nothing (says he) dishonourable has ever passed." Opposition still insisted that they had a right to have an account of verbal negotiations as well as others; and that if this right was given up, a minister had no more to do, when he wished to promote an insidious measure, than to conduct it by verbal correspondence. The motion, however, was lost by a great majority in both houses.

This manner of deciding the question was so far from allaying the general ferment, that it rendered it much worse. The transaction was considered as entirely disgraceful to the British nation; nor were all the arguments that could be used by the ministerial party in any degree sufficient to overthrow the general opinion. The restitution of the island was thought to be an inadequate recompense for the affront that had been offered; and the objections to it were urged on a motion for an address to return thanks for the communication of the Spanish declaration, and to testify their satisfaction with the redress that had been obtained. This address was not carried without considerable difficulty, and produced a protest for 19 peers. On the part of Spain, however, every part of the agreement was ostensibly fulfilled; Port Egmont was restored, and the British once more took possession of it, though it was in a short time after evacuated, according to a private agreement, as was suspected, between ministry and the court of Spain; but of this no evidence ever appeared to the public.

In other respects, the greatest discontents raged throughout the kingdom. A fire which happened at Portsmouth in the year 1770 excited numberless jealousies, and was by some imputed to our enemies on the continent. The affair of the Middlesex election was never forgot; and notwithstanding many repulses, the city of London still ventured to present new petitions to the throne. In one presented this year by Mr Beckford, the lord mayor at that time, they lamented the

Britain.

506

A general dissatisfaction with the manner in which the affair is terminated.

507

The settlement final-ly abandoned.

Britain.

the heavy displeasure under which they seemed to have fallen with his majesty, and renewed a petition, frequently presented before, concerning a dissolution of parliament. This, however, met with a very unfavourable answer: his majesty informed the lord mayor, that his sentiments on that subject continued unchanged; and that "he should ill deserve the title of Father of his people, should he suffer himself to be prevailed on to make such an use of his prerogative as he could not but think inconsistent with the interest, and dangerous to the constitution, of the kingdom." Mr Beckford was so far from being disheartened by this answer, that he demanded leave to speak to the king; which being obtained, he made a speech of considerable length, and concluded with telling his majesty, that "whoever had already dared, or should hereafter endeavour, by false insinuations and suggestions, to alienate his majesty's affections from his loyal subjects in general, and the city of London in particular, was an enemy to his majesty's person and family, a violator of the public peace, and a betrayer of our happy constitution as it was established at the glorious revolution." To this no answer was made, though it gave great offence: and when Mr Beckford went afterwards to St James's with an address on the queen's safe delivery of a princess, he was told, that "as his lordship had thought fit to speak to his majesty after his answer to the late remonstrance; as it was unusual, his majesty desired that nothing of the kind might happen for the future."

508
Remark-
able speech
of Mr Beck-
ford to his
majesty.

509
Gives of-
fence.

510
His death.

511
Proposals
for redu-
cing the
powers of
the attorney
general.

This behaviour of Mr Beckford was by many of the court-party censured in an extreme degree, as indecent, unprecedented, impudent, and little short of high treason; while, on the other hand, he was on the same account raised to the highest pinnacle of popular favour. He did not long, however, enjoy the applause of the people, dying within a short time after he made the celebrated speech above mentioned, and his death was reckoned an irreparable loss to the whole party. Several other petitions were presented on the subject of popular grievances; but the perpetual neglect with which they were treated at last brought that mode of application into disuse. A new subject of contention, however, now offered itself. The navy was in a bad condition, and the sailors every where avoided the service. Towards the end of August 16 ships of the line were ready to put to sea; but the legality of press warrants being questioned, the manning of them became a matter of great difficulty. The new lord mayor, Brads Crosby, refused to back the warrants; which proved a vexatious matter to the ministry. They were further provoked by the unbounded liberty to which the press had been carried, and the mode of proceeding against some libellers had produced many complaints regarding the powers of the attorney general. He had filed informations and carried on prosecutions *ex officio*, without going through the forms observed in all other cases.—"This (it was said by the patriotic party) was inconsistent with the nature of a free government. No power can be more dangerous to private liberty, nor to the virtue or principles of him who enjoys it. The attorney acts under a minister, and his sense of duty must be very strong, or his independence very thoroughly secured by contentment, if

he is at no time tempted to swerve from the laws of conscience and equity. It is in his power to give what name he pleases to a paper, and call it seditious or treasonable; then, without the interference of a jury, he proceeds to try the offender; who, though he may be acquitted, may nevertheless be ruined by the expences attending his justification. "Examples were cited on this occasion of very flagrant oppression and injustice from this very power: the laws, it was said, were become changeable at the pleasure of a judge; and the liberty of the subject was taken from him whenever he became obnoxious to his superiors. As these proceedings had therefore been the cause of very general complaint, a motion was made in the house of commons to bring in a bill for explaining and amending an act of the 4th and 5th of William and Mary to prevent invidious informations, and for the more easy reversal of outlawries in the court of king's bench. This motion was rejected by a great majority; the ministerial party urging, that the power of the attorney general was the same that ever it had been, and founded on common law. The abuse of power was no argument against the legal exercise of it; it was dangerous to overthrow established customs; the actions of the attorney general were cognizable by parliament, which controul must for ever prevent a licentious exertion of his power. &c.

These arguments, however, even with the rejection of the motion, did not put an end to the disputes on this head. The courts of justice themselves were at this time held up in a very despicable light, on account of some late decisions which had been deemed contrary to law and usual practice. By these the judges had assumed a power of determining whether a paper was a libel or not; and the business of the jury was confined to the determination of the fact regarding its publication; and thus it was said to have appeared, that the judges had it in their power to punish a man who had been found guilty of publishing a paper, whether seditious or not. Lord Chatham in a speech on the Middlesex election, took occasion to mention these abuses; and was answered by lord Mansfield, who looked upon himself to be particularly pointed at. The former, however, was so little convinced by his answer, that he drew from it an additional confirmation of his own arguments; and moved that a day should be appointed for taking into consideration the conduct of the judges; in which he was ably seconded by the late lord chancellor. A committee was accordingly moved for on December 6th 1770, to inquire into the matter; but after much debate, was rejected by 184 to 76. The affair, however, did not yet seem to be terminated. Lord Mansfield gave notice next day, that on Monday he would communicate to the house of lords a matter of the utmost importance; but when that day came, he produced nothing but a paper containing the case of Woodfall the printer as tried in the court of king's bench, that whoever pleased might read or take copies of it. This was looked upon as exceedingly frivolous, and greatly disappointed the expectations of the whole house. His lordship was asked, whether he meant that the paper should be entered on the journals of the house or not? To which he answered, that he had no such intention,

512
Rejected.

513
Disputes
concerning
the behavi-
our of the
judges.

Britain. but only that it should be left in the hands of the clerk; on which the affair would probably have been overlooked altogether, had not the late lord chancellor, who all along strongly supported the motion, stood up to accuse lord Mansfield, from the very paper to which he appealed, of a practice repugnant to the law of England. Hence he took occasion to propose some queries relative to the power of juries, and challenged his antagonist to a debate either at that time or soon after. But this method of proceeding was complained of as too precipitate, and an excuse was likewise made for not assigning a day for the debate at any other time; so that the matter soon sunk into oblivion. It was, however, loudly talked of without doors; and the judges, who had already fallen much in the estimation of the people, now became much more obnoxious. Pamphlets were printed containing the most severe accusations; comparisons were made betwixt some of the law-lords and their predecessors, and even the print-shops were filled with ridiculous and satirical pictures.

514
Shameful
tumult in
the house of
lords.

An accident which took place soon after contributed also greatly to lessen the character not only of the ministerial party, but even that of both houses of parliament taken collectively in the eyes of the vulgar, to an extreme degree; and indeed it must be owned that nothing could be more derogatory to the honour of the first assembly of the nation, or to that of the individuals who composed it. A motion was made on the 10th of December 1770 by the duke of Manchester, that an address be presented to his majesty, that he would be graciously pleased to give orders for quickening our preparations for defence in the West Indies and in the Mediterranean; and particularly for securing the posts of Gibraltar and Minorca. But while his grace was descanting on the negligence of ministry in leaving posts of such importance in a defenceless state, he was suddenly interrupted by lord Gower, who insisted on having the house immediately cleared of all but those who had a right to sit there. "When motions (said he) are thus brought in by surprise, and without the knowledge of the house as to their contents, it is impossible but such things may be spoken as are improper for the general ear; especially as the enemy may have spies in the house, in order to convey secret intelligence, and expose the nakedness of our possessions." His lordship was answered by the duke of Richmond, who complained of the interruption given to the duke of Manchester as a proceeding both irregular and insidious. This produced a considerable degree of altercation; and the cry of "Clear the house!" resounded from all quarters. Several members attempted to speak, but finding it impossible, and piqued at this shameful behaviour, 18 or 19 of them left the house in a body.

515
Members
of the house
of commons
affronted,
which occa-
sions a mis-
understand-
ing betwixt
the two
houses.

The members of the house of commons then present were not only commanded to depart, but some of the lords went personally to the bar, and insisted on their leaving the house immediately. These unfortunate members alleged in excuse, that they attended with a bill, and were there in the discharge of their duty; but this availed nothing, they were peremptorily ordered to withdraw till their message should be delivered; and after going through the usual forms, were turned out of doors amidst the greatest tumult and up-

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roar. In the mean time the lords, who had just left the house of peers, had gone to the lower-house, where they were listening to the debates, when the commons, who had been turned out of the house of lords, arrived full of indignation, and making loud complaints of the affront they had received. This was resented by turning out indiscriminately all the spectators; among whom were the 18 peers just mentioned, who were thus shut out from both houses. The affair terminated in a misunderstanding betwixt the two houses, which continued during the whole session. Sixteen lords joined in a protest; and in the warmest terms censured the treatment they had met with, as well as the unprecedented behaviour of administration, who had thus attempted to suppress the freedom of argument, and render the conduct of the house an object of censure and ridicule to the whole world.

After the discussion of the affair of Falkland's islands in the manner already related, a most unheard of instance of corruption was laid before parliament in the borough of New Shoreham in Suffex. The contest was occasioned by the returning officer, Mr Roberts, having returned a candidate with only 37 votes, when the other had 87; and on bringing him to trial for this strange proceeding, the following scene of villany was laid open. A great number of the freemen of the borough had formed themselves into a society called the *Christian Society or Club*; but instead of keeping up the character indicated by this title, it was clearly proved by the returning officer, who formerly belonged to it, that it was employed only for the purposes of venality. A select committee of the members were appointed to sell the borough to the highest bidder. The committee men never appeared at elections themselves, but gave orders to the rest, and directed them how to vote; and after the election was over shared the profits among themselves. Though all this was clearly proved, the returning officer was dismissed with only a reprimand from the speaker of the house of commons, for having trespassed upon the forms to be sacredly observed by a returning officer. A more severe punishment, however, was reserved for the borough, and those wretches who had assumed the name of the *Christian Club*. A motion for an inquiry being carried unanimously, a bill was brought in to incapacitate 81 freemen of this borough, whose names were mentioned, from ever voting at parliamentary elections; and, for the more effectually preventing bribery and corruption, the attorney general was ordered to prosecute the committee belonging to the Christian club: the members were allowed counsel; and many different opinions were offered regarding the mode of punishment. Some were mercifully inclined only to reprimand them, while others proposed to disfranchise the borough; however, the bill for incapacitation was passed at length, though it did not receive the royal assent till the last day of the session.

The unbounded licentiousness of the press now called the attention of parliament, though the evil appeared in a manner incapable of being checked. At this time neither rank nor character were any security against the voice of calumny from one party or other; and indeed it was hard to say on what side the most intemperate violence appeared. The ministry, how-

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ever, provoked by a long course of opposition, made the loudest complaints of the freedoms taken with their names; while it was retorted by opposition, that the abuse from one quarter was as great as from the other. Some members of the house of commons complained that their speeches had been misrepresented in the papers, and endeavoured to put a stop to the practice of printing them. It was now considered as a matter contrary to the standing order of the house to print the speeches of the members of parliament at all; and a motion for calling two of the principal printers to account was carried by a considerable majority. The printers, however, did not attend the summons of the messenger; and a final order for their appearance was directed to be left at their houses, and declared to be sufficient notice when left at their houses. The disobedience of the printers on this occasion was undoubtedly heightened by the favour they hoped to obtain from the popular party; and indeed it was not without the most severe animadversions that the ministry were able to carry their motions against them. This opposition increased by its being farther moved that they should be taken into custody by the serjeant at arms for contempt of the orders of the house. The temper and disposition of the people towards the house was now objected, and the great impropriety of adding to their alarms by any unnecessary stretch of the executive power; but the majority urged the necessity of preserving the dignity of the house, and putting an end to those excessive freedoms which had been taken with its members. The serjeant at arms next complained, that not being able to meet with the printers at their houses, he had been treated with indignity by their servants; on which a royal proclamation was issued for apprehending Wheble and Thomson, the two obnoxious printers, with a reward of L. 50 annexed. But in the mean time six other printers, who had rendered themselves equally obnoxious on a similar account, were ordered to attend the house, though the motion was not carried without great opposition, during which time the house divided between 20 and 30 times. Some of the delinquents were reprimanded at the bar, and one who did not attend was ordered to be taken into custody for contempt. Wheble being apprehended in consequence of the proclamation, was carried before Mr Alderman Wilkes, by whom he was discharged. To this magistrate it appeared that Mr Wheble had been apprehended in direct violation of his rights as an Englishman, as well as of the chartered privileges of a citizen of London; which opinion he declared in a letter to the earl of Halifax, one of the secretaries of state. Thomson was discharged in the same manner; but the captors received certificates from the magistrates, in order to obtain the promised rewards. J. Miller, one of the six who had refused to attend, was taken into custody from his own house by the messenger of the house of commons. On this he sent for a constable, and was carried along with the messenger before the lord mayor, and aldermen Wilkes and Oliver at the mansion house. The lord mayor refused to deliver up the printer and messenger at the request of the serjeant at arms; and after some disputes the messenger was committed to prison, as he had been accused by Miller of assault and false imprisonment, and

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Lord Mayor
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the serjeant had refused to find bail; however, he was immediately released upon the bail being given.

By this affront not only the majority but many of the popular party also were greatly irritated: however, the members in opposition took care to lay all the blame on the absurd conduct of administration with regard to the Middlesex election; in consequence of which they had incurred such a general odium, that the people thwarted every measure proposed by them, and eluded and despised their power on every occasion. The lord mayor was ordered to attend the house next day; at which time he pleaded that he had acted in no manner of way inconsistent with the duties of his office; as, by an oath which he took when entering upon it, he was bound to preserve the franchises of the city, and his conduct was farther to be vindicated from the terms of the city charters, as recognised by act of parliament. It was then moved that he should be allowed counsel; the question appearing to belong to the lawyers, as his lordship did not pretend to deny the privileges of the house, though he contended for an exemption from that privilege by virtue of charters and an act of parliament. This motion, however, was over-ruled, it being insisted that no counsel could ever be permitted against the privileges of the house. This refusal of counsel took its rise from a transaction in the reign of Henry VIII. and was now pleaded as the custom of parliament. Some proposed that the lord mayor should be heard by counsel, provided the privilege of the house was not affected; but it was considered as absurd to the last degree, that his lordship should be heard by counsel on every point except the very one in question. At the same time a motion was carried, that the lord mayor's clerk should attend with the book of minutes; and notwithstanding all opposition, he was obliged to expunge out of it the recognizance of Whittam the messenger. This was followed by a resolution that there should be no more proceedings at law in the case; a great altercation ensued, and several of the minority at last left the house in the utmost rage.

Though it was now one o'clock in the morning, the ministerial party were so ardent in the prosecution of their victory, that they refused to adjourn; proceeding now to the trial of Mr Oliver, who, as well as the lord mayor, was far from expressing any sorrow for what he had done. Some proposed to censure his conduct, others were for expulsion; but when it was proposed to send him to the Tower, the utmost confusion and mutual reproach took place; some members declared that they would accompany him to the place of his confinement; others left the house, while ministry used their utmost endeavours to persuade him into some kind of apology or concession for what he had done; but finding that to no purpose, they at last carried the motion for his imprisonment, and he was committed accordingly. Ample amends, however, were made for this punishment by the unbounded popular applause heaped on both the lord mayor and alderman on this occasion, and which indeed threatened very serious consequences. Some days after the commitment of Mr Oliver, when the lord mayor attended at the house of commons, several very alarming insults were offered to many of the members, particularly

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Proceed-
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And against
alderman
Oliver.

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Both com-
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the Tower.

Britain. larly lord North; who on this occasion lost his hat, and narrowly escaped with his life. Some of the members of the minority interposed, and expostulated with the mob on the impropriety of their conduct, by which means all further disturbance was prevented; and had it not been for this timely interference, it is supposed that the fray would not have ended without much bloodshed.

After the confusion was in some measure dispelled, the debates concerning the lord mayor again took place. Many arguments were brought against proceeding farther in the matter; but being disregarded, the minority members left the house. His lordship refused the favour offered him of being committed to the custody of the serjeant at arms, upon which it was resolved to commit him to the Tower; the motion for this purpose being carried by 200 against 39. Mr Wilkes, on being ordered to attend, wrote a letter addressed to the speaker of the house, in which he observed, that no mention had been made of his being a member; and that if his seat in parliament, to which he had been duly elected, was to be granted him, he would attend and justify his conduct. Administration, however, were too wise now to encounter this hero, and at the same time were under no little embarrassment how to get off; so at last they were reduced to the miserable shift of ordering him to attend on the 8th of April 1771, at the same time that they adjourned the house to the 9th.

The many affronts and indignities which administration had of late been obliged to put up with now rendered it absolutely necessary to fall upon some method to show that their authority was not altogether lost.

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Ridiculous
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Wilkes.

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Committee
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commons.

For this purpose a committee was appointed by ballot to inquire into the reason why there had been so many obstructions to the authority of the house of commons. This committee having sat from the 28th of March to the 30th of April, at last gave in the following report. "Your committee beg leave to observe, that in the diligent search they have made in the journals, they have not been able to find an instance that any court or magistrate has presumed to commit, during the sitting of parliament, an officer of the house for executing the orders of the house. They further beg leave to observe, that they have not been able to find, that there ever has been an instance wherein this house has suffered any person, committed by order of this house, to be discharged, during the same sessions, by any authority whatever, without again committing such persons. As therefore, with regard to J. Millar, who was delivered from the custody of the messenger by the lord mayor, who for the said offence is now under the censure of the house, it appears to your committee, that it highly concerns the dignity and power of the house to maintain its authority in this instance, by retaking the said J. Millar; the committee recommend to the consideration of the house, whether it may not be expedient, that the house should order that the said J. Millar should be again taken into custody of the serjeant at arms; and that his deputy or deputies be strictly enjoined to call upon the magistrates, officers of the peace, and other persons, who by the speaker's warrant are required to be aiding and assisting to him in the execution thereof, for such assistance as the said serjeant, his deputy or deputies,

shall find necessary, to enable him or them to take into custody the said J. Millar."

Nothing could have been more imprudent than the urging with such violence a contest against such contemptible adversaries; and in which they were finally baffled. What they intended for punishment really afforded the criminals matter of triumph and exultation. Every honour that the city of London could bestow was conferred upon the magistrates, while the complaints and execrations of the people at large became louder than ever. Every step taken about this time by administration seemed calculated to add to the public ill humour. Towards the end of the session a bill was brought in "for enabling certain persons to inclose and embank part of the river Thames, adjoining to Durham yard, Salisbury-street, Cecil-street, and Beaufort buildings in the county of Middlesex." This bill was opposed, as appearing contrary to the ancient rights and privileges of the city of London; but was easily carried through both houses, though it produced a protest in the upper house; and a few days before the rising of the session, the city of London petitioned against it. In this petition it was complained of as a violent and unjust transaction, totally unprecedented; being an invasion of the property which the city claimed in the soil or bed of the river. It was afterwards complained of in a remonstrance, as an infringement of the rights of the people, and urged as a reason for the dissolution of parliament.

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Dissatisfac-
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bill.

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East India
affairs con-
sidered.

The only other transaction of moment during this session related to the East India company. It was now proposed to raise 2000 men in England for the service of the company, the officers to be appointed by the king, and to be paid by the company. But after much speculation, it was rejected as unconstitutional and dangerous to keep an armed force in the kingdom which was not paid by government; and that, however inconsiderable the number proposed was at present, it might soon be increased on any frivolous pretence. It was likewise urged, that it would prove an obstruction to the recruiting service for our own army, on account of the superior advantages of enlisting in the company's service. The advocates for the bill urged the inconvenience of sending out a sufficient number of men annually to recruit the Indian forces; and that, unless parliament should adhere to the promise they formerly made of assisting the company in recruiting, they would be daily exposed to vast loss and expence from the tricks of recruiting parties. The session rose on the 8th of May. In the speech from the throne, it was observed, that the satisfaction obtained from his Catholic majesty for the injury done to this kingdom, and the proofs of the pacific disposition which the courts of France and Spain had given by laying aside their armaments, enabled us to reduce our forces by sea and land. The zeal manifested by parliament could not fail to convince the world of its affectionate attachment to the crown and regard to the interests of the country. His majesty's endeavours were promised to put an end to the troubles which still prevailed in some parts of the continent; thanks were given to the commons for the unanimity, cheerfulness, and public spirit with which they had granted the supplies; and an apology was made for the extraordinary demands which had been made. The speech concluded with

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advising the members to use their best endeavours, in their respective stations and counties, to render the national happiness complete, by discouraging needless suspicions and domestic disturbances. His majesty had no other object, and could have no other interest, than to reign in the hearts of a free and happy people; and it was his earnest wish that his subjects might not be prevented, by mistakes or animosities among themselves, from enjoying the happiness they had in their power.

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Popular
party dis-
couraged.

The many defeats that had been received by opposition during this and the foregoing sessions, now began to discourage them from proceeding such lengths in the cause of patriotism as they had formerly done. Many of them had also lost much of their popularity by taking an active part against the printers; and as every motion had been carried in favour of administration by nearly two to one, a general discouragement and languor began to take place among the popular party. The only gainers indeed by the late contentions were the city magistrates and printers who had been punished by the house of commons. On the rising of the parliament, when the lord mayor and alderman were released from the tower, they were welcomed by every mark of congratulation. The city was illuminated; and the mob, as usual, took vengeance on the refractory by breaking their windows. A committee was even appointed to carry on a prosecution against the speaker of the house of commons; but as this did not seem likely to afford any redress, they determined once more to have recourse to the throne. Accordingly, on the 10th of July 1771, another petition and remonstrance was presented, the subjects of which were the embankments on the Thames, the proceedings against the magistrates, and a speedy dissolution of parliament was requested. But this met with as unfavourable an answer, as before. His majesty replied, that he was ready to put an end to the real grievances of his faithful subjects; but was sorry to find that a part of them still renewed requests which he had repeatedly refused to comply with.

In the speech from the throne, when the parliament met, January 21st 1772, his majesty observed, that the performance of the king of Spain's engagements, and the behaviour of the other European powers, promised a continuance of peace; and though the necessity of keeping up a respectable naval force was evident, yet no extraordinary aid for that purpose would be necessary; and he concluded with recommending the most vigilant and active attention to the concerns of the country, with an assurance of the interposition of the crown to remedy abuses or supply defects. Little dispute was made about the addresses in answer to this speech, though an ample subject of altercation very soon occurred. This was a motion made by admini-

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Debates on
the aug-
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stration, intimating the necessity of raising 25,000 seamen for the service of the current year; it being always necessary, they said, for us to preserve a superiority to the French in the East Indies, which had not been the case since they sent a considerable fleet thither. "It was equally necessary (they added) to preserve the present strength of the West Indies unimpaired; as the Spaniards knew the importance of our settlements there too well not to make an attack upon them first if ever a rupture should take place. Twenty of the best ships in the navy were also now employed as guard-

ships, and wanted nothing but men to fit them for actual service."

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A declaration of this kind, coming immediately after the assurances of peace that had been given from the throne, was said to be a contradiction; that the peace-establishment would thus be augmented till we were overburdened by it; 500,000*l.* would thus be added to the national expences; and as the same augmentation might every year be made on similar pretences, we should thus be obliged to submit to the hardships of war in time of a profound peace. If the assurances of peace from the throne were well founded, the force in the East Indies was already too great; if, on the contrary, a war was at hand, it would be too small notwithstanding the proposed augmentation; and the same way Jamaica was likely to suffer from the inferiority.

These remonstrances were by no means sufficient to put a stop to any measure which had at this time been suggested by administration. The question for the augmentation was carried without a division: after which the subject of religion came to be discussed. This was occasioned by the general tendency to Arianism or Socinianism, which had for some time prevailed to a great degree, and had at last infected the established church in such a manner, that the subscription to her standards was reckoned intolerable by many of the clergy. Meetings had been frequently held by the discontented members, in order to consider of some mode of relief; and in the beginning of February 1772, about 250 of them, with several professors of law and physic, joined in a petition to the house of commons, expressing their dissatisfaction with subscription to any articles human forms, and praying for relief. In this petition they asserted, that they held certain rights and privileges from God alone, without being subject to any other authority; such as the exercise of their own reason and judgment, by which they were instructed and confirmed in their belief of the Christian religion, as contained in the holy scriptures. They accounted it a blessing to live under a government which maintained the sufficiency of the scriptures to instruct in all things necessary to salvation. Hence they concluded, that they had a right from nature, as well as from the principles of the reformed religion, to judge for themselves what was or was not contained in the scriptures. From this invaluable privilege, however, they found themselves in a great measure precluded by the laws relative to subscription; by which they were enjoined to acknowledge certain articles and confessions of faith framed by fallible men as entirely agreeable to scriptures. They prayed therefore to be relieved from such an imposition, and to be restored to their undoubted right of interpreting scripture for themselves, without being bound by any human explanation of it, or being required to acknowledge by subscription or declaration the truth of any formulary of religious faith and doctrine whatever excepting the holy scripture itself.

The affair of subscription they looked upon to be not only a grievance to themselves, but an encroachment on their rights as men and members of a Protestant establishment, as well as a great hinderance to the spreading of the Christian religion, tending to discourage further inquiry into the true sense of scripture, to divide communions, and to cause a mutual dislike

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Petition a-
gainst sub-
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Britain. dislike betwixt fellow Protestants; giving occasion for unbelievers to reproach and vilify the clergy, by representing them as guilty of prevarication, and of accommodating their faith to lucrative views and political considerations. It afforded also to Papists and others disaffected to the religious establishment of the church of England, an occasion of reflecting upon it as inconsistent, and authorising doubtful and precarious doctrines, at the same time that the scripture alone was acknowledged to be certain and sufficient for salvation. It had likewise a tendency to divide the clergy among themselves; subjecting one part, who asserted their privilege as Protestants, to be reviled both from the pulpit and the press, by another who seemed to judge the articles they had subscribed to be of equal authority with the scripture itself; and, lastly, it occasioned scruples and embarrassments of conscience to those who were about to enter into the ministry, or prevented the cheerful exercise of it to those who were already entered. By reason of these embarrassments the clerical part of the petitioners found themselves under great difficulties, being obliged in some sense to join with the adversaries of revelation, in supposing the one true sense of scripture to be expressed in the present established system of faith; or else to incur the reproach of having deserted their subscription, &c. while such of the petitioners as had been educated with a view to the professions of civil law and physic could not but think it a great hardship to be obliged, as they all were in one of the universities, even at their first matriculation and admission, though at an age very improper for such important disquisitions, to subscribe their assent to a variety of theological tenets, concerning which their private opinions could be of no consequence to the public, in order to intitle them to academical degrees in those faculties; more especially as the course of their studies and attention to their practice did not afford them leisure sufficient to examine how far these tenets were consonant to the word of God.

This petition was presented by Sir William Meredith, who, along with the other members who favoured the cause, enforced it by many arguments drawn from the principles of toleration. They maintained also that nothing but hypocrisy and prevarication could arise from obliging men to subscribe what they did not believe; that the repeal of the laws for subscription would prevent the increase of dissenters, so very conspicuous at this time, and incline many of them to return to the church. The articles themselves were said to have been compiled in a hurry; that they contained doctrines highly controvertible; and that this restraint on the consciences of men was of all others the greatest hardship. The majority of parliament, however, were found inimical to the petition, though some who opposed it at present wished for time to consider it more deliberately, or to refer it to a committee of the clergy. By the rest it was urged, that the matter of the petition was a violent infraction of the laws of the English religion; and that if this was granted, another would soon follow against the liturgy. The conduct of many of the petitioners, instead of being founded in any regard for religion, had its origin in hypocrisy and dissoluteness, and certainly proceeded in many instances from a disbelief of the

Britain. Trinity, and of the divinity of our Saviour. The complaints of men were to be disregarded when they wished to profit by the emoluments of the church without subscribing to its laws; besides, the king was bound by his coronation oath to continue the church-government without alteration. It was likewise urged, that if people were to be restrained by no other article than an assent to the truth of the scriptures, the church would soon be over-run with impiety. Many had already founded blasphemous tenets on the right of private opinion; and though it could not be denied that every man has this right for himself, yet none has a right to obtrude his singularities upon others; and if any of the clergy found the delicacy of their consciences affected after they had accepted of benefices, they were welcome to leave them.

Some of the more moderate opposers of the petition endeavoured to vindicate the character of the clergy from the imputations laid upon them; and contended that the legislature had a controuling power over the articles of the union, and confirmed their assertion by mentioning the act against occasional conformity, as well as another against elective patronages, both of them passed since the union: and it seemed to be the general wish of the house that the professors of law and physic might be relieved from subscription, though they did not consider their share in the matter as of any great importance to the public. It was at last thrown out by a majority of near 150.

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Rejected.

The rejection of the subscription bill was followed by that of a bill for quieting the possessions of his majesty's subjects from dormant claims of the church; after which the attention of parliament was called to one of the utmost importance, and which was introduced by a message from the king. This was the famous royal marriage bill, occasioned by the marriage of the duke of Cumberland with Mrs Horton, a widow lady, daughter of lord Irnham, and sister to colonel Luttrell, and that of the duke of Gloucester with the countess-dowager of Waldegrave. By the message it was recommended to both houses to take it into their consideration, whether it might not be expedient to supply the defects of the laws then in being, and by some new regulations more effectually to prevent the descendants of his late majesty (excepting the issue of the princesses who had married, or might hereafter marry into foreign families) from marrying without the consent of his majesty, his heirs, and successors. In consequence of this a bill was brought in, declaring all such marriages, without the consent above mentioned, to be null and void. The descendants of his majesty, however, if above the age of 25 years, might marry without the royal consent, provided they gave intimation a twelve-month before hand to the privy council, and no opposition to the match was made by parliament during that interval.

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Royal marriage-bill.

This bill met with the most violent and powerful opposition. The principal arguments against it were expressed in two protests from the upper house, and were to the following purpose: 1. The doctrine that marriages in the royal family are of the highest importance to the state, and that therefore the kings of this realm have ever been trusted with the care thereof, is both absurd and unconstitutional; though it would from that period have the force of a parliamentary declaration.

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Protests against it.

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claration. The immediate tendency of this was to create as many prerogatives to the crown as there are matters of importance in the state; and to extend them in a manner as vague and exceptionable as had ever been done in the most despotic periods. 2. The enacting part of the bill had an inconvenient and impolitic extent; namely to all the descendants of Geo. II. In process of time, that description might become very general, and comprehend a great number of people: and it was apprehended that it would be an intolerable grievance for the marriages of so many subjects, perhaps dispersed among the various ranks of civil life, to be subject to the restrictions of this act; especially as the abettors of this doctrine had also maintained, that the care and approbation of the marriage also included the education and custody of the person. This extensive power might in time make many of the first families of the kingdom entirely dependent on the crown; and it was regretted that all endeavours to limit, in some degree, the generality of that description, had proved ineffectual. 3. The time of nonage for the royal family appeared to be improperly extended beyond the limit of 21 years; a period which the wisdom of the constitution seems with great wisdom to have assigned to minority. 4. The deferring their marriage to the age of 26 might also be attended with other bad consequences, by driving them into a disorderly course of life, which ought to be particularly guarded against in those of such an exalted station. 5. The power given by this bill to a prince to marry after the age of 26, is totally defeated by the proviso which declares the consent of parliament to be ultimately necessary. Thus great difficulties must be laid on future parliaments, as their silence in such a case must imply a disapprobation of the king's refusal; and their concurrence with it might prove a perpetual prohibition from marriage to the party concerned. 6. The right of conferring a discretionary power of prohibiting all marriages, appears to be above the reach of any legislature whatever, as being contrary to the inherent rights of human nature; which, as they are not derived from, or held under, the sanction of any civil laws, cannot be taken away by them in any case whatever. The legislature no doubt has a right to prescribe rules to marriage as well as to every other kind of contract; but there is an essential difference between regulating the mode by which a right may be enjoyed, and establishing a principle which may tend entirely to annihilate that right. To disable a man during life from contracting marriage, or, which is the same thing, to make his power of contracting such marriage dependent neither on his own choice nor on any fixed rule of law, but on the arbitrary pleasure of any man, or set of men, is exceeding the power permitted by Divine Providence to human legislature, and directly contrary not only to the divine command, but also to the rights of domestic society, and comfort, &c. 7. This bill has a natural tendency to produce a disputed title to the crown. If those who are affected by it are in power, they will easily procure a repeal of this act, and the confirmation of a marriage made contrary to it; and if they are not, it will at least be the source of the most dangerous faction that can exist in any country, viz. one attached to the pretender to the crown; whose claim, he may assert, has been set aside by no other

authority than that of an act to which the legislature was not competent, as being contrary to the common rights of mankind. 8. The bill provides no security against the improper marriages of princesses married into foreign families and those of their issue; which may full as materially affect the interest of this nation as the marriages of princes residing in the dominions of Great Britain. It provides no remedy against the improper marriage of the king reigning, though evidently the most important of all others to the public. It provides nothing against the indiscreet marriage of a prince of the blood, being regent at the age of 21; nor furnishes any remedy against his permitting such marriages to others of the blood-royal, being fully invested with the regal power for this purpose, without the assistance of council.

The answer to all these arguments was, that the inconveniences so much talked of were merely imaginary; and if the king should make any improper use of his authority, parliament had it either in their power to prevent the effect, or to punish the minister who advised it. The crown, it was said, was dishonoured by improper connections, and many of the greatest national calamities have proceeded from improper alliances between the royal family and subjects; and that if, from after experience, we should find any material grievances ensue from this act, it could as easily be repealed at that time as thrown out now, and on better grounds. It was very rapidly carried through both houses; in the upper house by 90 to 26; and in the lower by 165 to 115.

Though the late decision concerning subscription to the 39 articles did not seem to promise much success to any innovations in religious matters, yet the case of dissenting ministers was introduced soon after the discussion of the royal marriage act; the advocates for it being encouraged to bring it forward chiefly on account of some favourable hints thrown out in the debates on the subscription-bill. A petition was now presented by a great body of these people, praying to be relieved from the hardship of subscribing to the articles of a church to which they did not belong. This, however, was most violently opposed by the opponents of the former bill, though with very little success in the house of commons, where it was carried through by a prodigious majority. Here it was maintained that nothing can advance the true interest of religion so much as toleration; and if articles of subscription are necessary, it must only be for men destitute of principle, and who would, in compliance with ambition or avarice, as readily subscribe to one set of articles as another. If thus any of the fundamental doctrines of Christianity are impugned, there are abundance of laws in existence to correct the impiety. The dissenters have indeed altered some of their original forms and doctrines, but that only in matters of indifference. It is the effect of learning, leisure, and refinement, to give men many opportunities of altering established forms. This has been the case formerly, and always will be. The dissenters have long been virtually exempted from this subscription; and yet the piety and decency of many of them, particularly in Scotland and Ireland, where no such laws are in being, sufficiently show, that men, whose minds are steadfast in the purity of religion, will not be confined nor influenced by

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Bill for the
relief of
dissenters
proposed.

Britain. laws of human invention. But though the dissenters enjoy full liberty by connivance at present, where is their security against the sudden attacks of malice and envy, which may be backed by the sanction of law? Every neglect of a law by connivance is an additional proof of the necessity of abrogating that law; and liberty is but an empty name, where it is enjoyed by an oversight only, as it were, of our superiors. In the house of lords, however, the bill was rejected by a majority of 70. Here the doctrine of universal toleration was strenuously opposed, as well as the great danger set forth to which the church of England would be exposed by departing from the laws which guarded its privileges. The dissenters, it was said, had great cause to be satisfied with the favour they enjoyed by connivance; and the laws were only kept on record as a necessary curb, left in the degeneracy of a declining kingdom, religion should be destitute of protection against heresy and blasphemy.

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Rejected.

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East India
affairs.

The only other affairs of this session were some attempts at an inquiry into the affairs of the East India company, which were now in a very critical situation. These, however, did not come under consideration till the next session, which took place November 26th 1772, when his majesty gave this situation of the affairs of the company as a reason why he had called them together sooner than usual. The continuance of the pacific disposition of other powers was mentioned, and satisfaction expressed that the continuance of peace had afforded an opportunity of reducing the naval establishment, though a great force must always be necessary for the defence of these kingdoms. Economy was promised with regard to the supplies, and it was recommended to take every method that could be devised to remedy the dearth of provisions.

The affairs of the East India company took up the greatest part of the present session. It had been projected, as far back as the year 1767, when they were in a very flourishing condition, to bring them under the inspection of government, that the nation might share the immense wealth supposed to be enjoyed by the company. The design, however, did not succeed at that time, nor would it probably have been easily brought to bear, had not the affairs of the company been embarrassed by the bad conduct of their servants. During the last session a bill had been brought in for restraining the governor and council from all kind of trade, as well as for enlarging the power of the company over its servants. The bill, however, was rejected after the second reading, and indeed was thought to have been proposed only to introduce the succeeding business. The debates on the subject procured in a great measure the general belief of two points of much importance to the success of the scheme, viz. that the affairs of the East India company were in a very bad situation, owing to the behaviour of its servants; and that the company was at any rate insufficient for the government of such extensive possessions; of consequence that there was an evident necessity of giving up the management of it to the crown. A motion was now made in parliament, by a gentleman unconnected with administration, for a select committee to inquire into the affairs of the company: but many reasons were urged against this appointment, particularly that the season was too far advanced for a business

of such importance; that the committee, being a secret one, was not accountable for its conduct; and that as the minister would have it in his power to nominate the members of the committee, considerable partiality might on that account take place. The motion, however, was carried without a division; and the members were chosen by ballot.

The affairs of the East India company proceeded from bad to worse during the recess. The treasury at home was quite exhausted; while bills to a vast amount drawn on Bengal were nearly due; which, with their debt to the bank and other public offices, along with the sum to be paid to government, reduced them almost to the brink of bankruptcy. They were therefore reduced to the expedient of borrowing a sum of money from administration: but their application was received with great indifference. The minister desired them to apply to parliament. The reports of the select committee, in the mean time, contrary to the promise of secrecy, were published, and gave the public no favourable opinion of the behaviour of the company's servants. On the meeting of parliament, the minister moved for another committee, under the title of the *committee of secrecy*, to consist of 13 persons, for taking into consideration the state of the company's affairs; which might thus undergo a full investigation without any thing being known to the world, which had excited such indignation in the former case. The members of this new committee were also to be chosen by ballot; so that no objection could militate against them that did not militate with equal strength against the whole house. It was objected, that this mode of secret inquiry, by a small number, was unprecedented and unconstitutional; that the members would in effect be nominated by the minister, and act under his direction; and that a free investigation by the whole parliament was essentially different from that by a secret committee. In the latter case, every information that the minister thought proper to conceal would be withheld: at any rate, a committee of secrecy is an evident absurdity; a committee can be no longer a secret than during the time it takes up for inquiry. Its proceedings must be laid before the public; and in case of unjust accounts, the parliament had no means of being undeceived. These reasons, however, were of no avail at present. The committee of secrecy was carried, as the other had been, without a division; and, as had been predicted, the members, though chosen by ballot, were almost all of them devoted to administration. The select committee was likewise revived, that they might be, as it was said, checks upon one another; so that between them the nation would have every requisite degree of information on the whole affair.

In a very short time after the appointment of the ⁵³⁷ *secret committee*, a report was given in, stating that the bill ^{Restraining} company were in great distress for want of money; and ^{posed.} as this was the case, a bill ought to be brought in for restraining them from sending out supervisors to India, a scheme which they had meditated at this time. The minister and his adherents enlarged greatly on the utility of this bill; which, they said, was highly expedient. It was the sincere wish of parliament to render them a great and glorious company: it was absolutely necessary for this purpose not to allow them to engage in an expensive commission, at a time when their affairs were so much

Britain.

Britain. much embarrassed that they were obliged to apply to government for a loan. It was even doubted whether the company, without the sanction of parliamentary authority, had power to appoint a commission of this kind. On the other hand, the minister's proposal was said by opposition to be unconstitutional and insidious. The want of cash at present experienced by the East India company was not of such great importance, their credit being then as fully established as ever. They had made choice of a set of men in whom they could confide; the many losses occasioned by their servants rendered the commission indispensably necessary; and the expence would be paid from the savings which must undoubtedly arise from so prudent a step. It was unreasonable, because the East India company, or any other, are distressed, to allow them no opportunities of extricating themselves. The company could not be said to want respect for parliament; they had showed this already by delaying the departure of the commission till the inquiry begun by the house was finished: nor could they be wanting in respect to their own interest, character, and constitution; which they seemed to show by every possible mark of opposition to this bill. Administration boasted of their intentions and their wishes to render this company great and glorious: but how could we expect greatness or glory to proceed from a quarter where it did not exist? The dignity of parliament was lessened, and its glory effaced, by the conduct of ministers, and the many wanton acts of authority lately committed. It was a curious method of rendering a company great and glorious to plunder the proprietors of immense sums of money by exorbitant grants, or by taking away their charters; for after this act it was plain that charters could no longer be depended upon. Two gentlemen belonging to the company, and then present in the house, offered to pledge themselves, that the commission of supervision should not be allowed to depart until, from further reports, a full knowledge of the company's affairs should be acquired. This, however, was instantly rejected, it being said to be defective in security; that the East India company would not scruple to make an agreement of this kind to day and break it to-morrow; which could only be prevented by an act of parliament, especially as the ministry had no motives for promoting this measure, but a regard for the welfare of the company, and a desire to restore its affairs to a better state.

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Ineffectual
attempts of
the company
to prevent the
passing of
the bill.

Notwithstanding all the arguments used by administration in favour of this bill, however, the company were so far from thinking it to their advantage, that they used every endeavour to prevent its passing into a law. They petitioned; and some of their servants were examined in the house of commons, in order to show the necessity of supervisors being sent out, who might be qualified to reduce their affairs to some order by being on the spot, and enabled to curb the excesses of which the company's servants had too frequently been guilty. During this examination it appeared, that from the year 1765 to 1773 the expences of the company had increased from 700,000 l. to 1,700,000 l. annually, and that government had received near two millions from the company every year; that they had immense profits in extraordinaries, while the proprietors lost considerably of the dividend which

the profits of their trade alone would have produced. Britain. In spite of all opposition, however, the bill for restraining the company from sending out any commission of supervision was carried by a majority of 153 to 28. In the house of lords it met with similar success, being carried by 26 to 6, though the minority thought proper to enter a protest. The reasons given against it in this protest were, that it took away from a great body corporate, and from several free subjects of this realm, the exercise of a legal franchise, without any legal cause of forfeiture assigned. The persons appointing the commissioners had by law a right to elect, and the persons chosen had a legal capacity of being elected. The supervisors had a full right vested in them agreeable to the powers and conditions of their appointment; but though no abuse was suggested, nor any delinquency charged upon them, those legal rights and capacities were taken away by a mere arbitrary act of power, the precedent for which leaves no sort of security to the subject for his liberties. The bill seemed likewise a manifest violation of the public faith. The charter of the East India company was granted by the crown, authorised by act of parliament, and purchased for valuable considerations of money lent and paid. By this the company were allowed to manage their own affairs as they thought proper, and by persons of their own appointment; but by this bill the exercise of the power just mentioned was suspended for a time, and by grounding the supervision upon the actual interference of parliament with the affairs of the company, established a principle which might be used for perpetuating the restraint to an indefinite length of time. It is indeed difficult to settle the legal boundary of legislative power, but it is evident that parliament is as much bound as any individual to observe its own compacts; otherwise it is impossible to understand what is meant by public faith, or how public credit can subsist. It appeared by evidence upon oath at the bar of the house of lords, that the company had received assurances from their chairman and deputy chairman, that the appointment of a commission for superintending and regulating their affairs would be approved by administration; and it was extremely hard that they should be able to find no security for their charter privileges against those very ministers under whose sanction they had reason to believe they were all along acting. It was also the more incumbent on the company at present to give the most strict attention to their affairs, to enable them to answer the exorbitant demands of government; as it appeared from the witnesses at the bar, that its exactions amounted to more than the whole profits of the late acquisitions, and the trade ensuing from them; while the proprietors, who had spent so much, and so often risked their all for obtaining these acquisitions, had not been permitted even to divide so much as the profits of their former trade would have afforded.

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Protest against it in the house of lords.

The secret committee now gave in their second report, containing a statement of the debt, credit, and effects of the company in England; beginning with an account of the cash in the company's treasury on the 1st day of December 1772, and containing a statement of all their debts and claims against them in every part of the world. Thus it appeared that the cash, credit,

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Second report of the select committee.

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State of the
company's
affairs.542
The state-
ment unfa-
ctious.543
Application
of the com-
pany to go-
vernment.
for a loan.544
Resolutions
of admini-
stration in
conse-
quence.545
Opposed in
vain by the
company.

credit, and effects of the company amounted to L. 6,397,299 : 10 : 6, and their debts to L. 2,032,306, which being deducted from the above account of their effects, left a balance in favour of the company of L. 4,364,993 : 10 : 6, without any violation of the fortifications and buildings of the company abroad. The statement, however, was complained of as unfair; and it was said, that impartiality was not to be expected from a set of men who had it in their power to make what report they pleased for the interest of government measures: but the members protested their innocence; and administration insisted, that, until proof could be brought that the statement was unfair, the house was bound to adhere to it as just.

The business was revived after the holidays by an application from the company to government for a loan of L. 1,500,000 for four years, at 4 *per cent.* interest, with liberty of repaying the same according to the abilities of the company, in payments of not less than L. 300,000; and that the company should not make a dividend of more than 6 *per cent.* until the loan should be reduced to L. 750,000; that then they might raise their dividend to 8 *per cent.* and after the whole loan was discharged, that the surplus of the nett profits arising in England, above the said dividend, should be appropriated to the payment of the company's bond debt, until it was reduced to L. 1,500,000, when the surplus profits should be equally divided between the public and the company. It was also requested, that the company should be released from the heavy penal interest incurred by the non-payment of money owing in consequence of the late acts for the indemnity on teas; and that they should be discharged from the annual payment of the L. 400,000 to the public for the remainder of the five years specified in the agreement. They farther requested, that the accounts of the Duannee revenues, of the charges of collection, expences of Bengal, company's accounts of sales, &c. should be delivered annually to parliament, and that leave might be given to export teas free of all duty to America, and to foreign parts. This request was judged expedient to be granted, and the following resolutions were agreed to, "That the affairs of the East India company are in such a state as to require the assistance of parliament: that a loan is necessary to reinstate the company's affairs; that the supply be granted; and that care be taken that the company be prevented from experiencing the like exigencies for the future. The two following motions were also founded upon the report of the secret committee, *viz.* That, supposing the public should advance a loan to the East India company, it was the opinion of the committee that the dividend should be restrained to 6 *per cent.* until the payment of the sum advanced; and that the company be allowed to divide no more than 7 *per cent.* until their bond-debt be reduced to L. 1,500,000.

These severe restrictions were judged proper by administration for the security of the public, and were such, they said, as every creditor has a right to make before hand with a person who wishes to borrow money from him. The company, however, replied, that these restrictions were contrary to the proposals they had made, and void of foundation, as being built on the erroneous reports of the secret committee. The chairman of the company declared at a general court that the government had agreed, or would agree, to the

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proposed increase of dividend, before the participation of profits took place betwixt the government and company; the first lord of the treasury had told him so, and now wished to deny what he had said by using these expressions in private conversation, and when he did not consider the chairman as acting officially. But if this was the case, to what purpose did public men hold conversations, since they were afterwards to deny or forget what passed? Some time was also demanded to consider of these motions; but that being denied, the question was put and carried as ministry wished.

The next step was to deprive the company of their territorial right to the countries they possessed in the East Indies. This had been allowed them in the most explicit manner, as appears by some of the papers which passed between the French and English ministers during the negotiations for the treaty of Paris; from one of which papers the following is an extract: "Respecting those territorial acquisitions which the English East India company have made in Asia, every dispute relative thereto must be settled by that company itself, the crown of England having no right to interfere in what is allowed to be the legal and exclusive property of a body corporate belonging to the English nation." This territorial right, however, was now denied. After reading the company's petition, lord North told the house that it was the opinion of several great lawyers, that such territorial possessions as the subjects of any state shall acquire by conquest, are virtually the property of the state, and not of those individuals who acquire them. It was his opinion, however, that it would be more beneficial to the public and to the East India company, to let the territorial acquisitions remain in the possession of the company for a limited time not exceeding six years, to commence from the agreement betwixt the public and the company. At the same time it was moved, that no participation of profits should take place betwixt the public and the company until after the repayment of L. 1,400,000 advanced to the company; and the reduction of the company's bond debt to L. 1,500,000. That after the payment of the loan advanced to the company, and the reduction of their bond-debts to the sum specified, three-fourths of the nett surplus profits of the company at home, above the sum of 8 *per cent.* upon their capital stock, should be paid into the exchequer for the use of the public, and the remaining fourth be set apart either for reducing the company's bond-debt, or for composing a fund for the discharging of any contingent exigencies the company might labour under.

These proceedings were exceedingly disagreeable to the company. They now presented a petition complaining of the injustice of demanding any farther terms on account of a loan, after that loan was discharged. The limitations of the company's dividend to 7 *per cent.* after the discharge of the loan, until their bond-debt should be reduced to L. 1,500,000, seemed not to be founded upon any just calculation of their commercial profits; nor could it with reason be alleged that it was necessary either to their credit or that of the public to restrain them in such a manner. The additional dividend of 1 *per cent.* was an object of some consequence to the proprietors, but very little to the discharge of their debt to the public; and the hardships of being limited in this manner were exceedingly

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aggravated

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Territorial
right of the
company
to their pos-
sessions de-
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The com-
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ally.

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aggravated by the losses sustained, and the expences they had incurred in acquiring and securing the territorial revenues in India, at the risk of their whole capital, while the public reaped such great advantages. The limitation of the company to a term not exceeding six years for the possession of their Indian territories they looked upon to be entirely arbitrary, as it might be construed into a final decision against the company respecting those territories to which they insisted that they had an undoubted right. Neither could they acquiesce in the resolutions by which three-fourths of the surplus nett profits of the company at home, above the sum of 8 *per cent. per annum* upon their capital stock, should be paid into the exchequer for the use of the public, and the remainder be employing either in further reducing the company's bond-debt, or for composing a fund to be set apart for the use of the company in case of extraordinary emergencies; such unheard of disposal of their property without their consent not being warranted by the largest pretensions ever made against them. It was likewise subversive of all their rights and privileges, by denying them the disposal of their own property after their creditors were properly secured by law. Their petition concluded with assuring ministers, that, rather than submit to these conditions, they desired that any claims against the possessions of the company might receive a legal decision; from which, whatever might be the event, they would at least have the satisfaction to know what they could call their own.

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They are
allowed to
export tea
duty free.

No regard being shown to this petition, the motions were carried in favour of administration. To make some kind of recompense, however, it was agreed on their part, that as the company had a stock of teas amounting to about 17 millions of pounds in their warehouses, they should be allowed to export as much of it as they thought proper free of duty, and employ the money thence arising for the behoof of their own affairs.

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East India
regulation-
bill brought
in.

This concession in favour of the East India company proved in the event the loss of the American colonies; nor indeed could these arbitrary proceedings with such a considerable body tend to impress the minds of any part of the nation with ideas favourable to the views of administration. In other respects the minister abated nothing of the disposition he had from first to last shown with regard to the company. On the 3d of May 1773 the following resolutions were laid down by him as the foundation of a bill for the establishing certain regulations for the better management of the East India company, as well in India as in Europe. These were, 1. That the court of directors should in future be elected for four years; six members annually, but not to hold their seats longer than four years. 2. That no person should vote at the election of the directors who had not possessed their stock twelve months. 3. That the stock of qualification should for the future be L. 1000, instead of L. 500. 4. The mayor's court of Calcutta should for the future be confined to small mercantile causes, to which its jurisdiction only extended before the territorial acquisitions. 5. That, instead of this court, thus taken away, a new one should be established, consisting of a chief justice and three puisne judges. 6. These judges to be appointed by the crown. 7. That a superiority

be given to the presidency of Bengal over the other presidencies in India. Each of these resolutions was carried by a great majority. The salaries of the judges were fixed at L. 6000 each, and that of the chief justice at L. 8000. The governor of the council was to have L. 25,000 annually, and the members of the council L. 10,000 each. By the friends of the company, however, the bill was supposed to have a tendency to effect a total alteration in the company's constitution in England, as well as the administration of all its presidencies in Asia, in order to subject all their affairs, both at home and abroad, to the immediate power of the crown. No delinquency was charged, nor any specific ground of forfeiture assigned; yet by this bill more than 1200 freemen were to be disfranchised and deprived of any voice in the management of their property. By cutting off the L. 500 stockholders, the proprietary would become more manageable by the crown; nor was there any security that the directors would be faithful to the interests of the company when they were no longer responsible to them for their actions. By the establishment of a general presidency over all the affairs of the company, and by the nomination of judges for India, government would in effect transfer the whole management of the affairs of the company to the crown, and the company would have no farther share in the business than to pay what salaries the crown thought fit to assign them. The proprietors of L. 500 stock presented a petition, setting forth, that, by king William's charter granted to the company, and repeatedly confirmed since that time, in consideration of many large sums repeatedly advanced by the company to the public, they were legally possessed of a right of voting at the election of directors, making of by-laws, or in any other matter relating to the affairs and government of the company; but by a clause in this regulating bill they were deprived of this right, and that under a pretence of preventing the pernicious practice of splitting stock by collusive transfers; but so far were the proprietors from giving way to such practices, that in the year 1767 they petitioned parliament for an act, by which the several proprietors intitled to vote should be obliged to hold this qualification six months at least before the exercise of their right, afterwards extending the time to twelve months, rather than the act should fail of its intended effect. This proposed increase of the qualification of the voters, however, could not in any degree answer the end desired; for the splitting of stock being confined to such proprietors as held large quantities, they would find it an easy matter to place their stocks in the hands of half the number of persons, and thus extend their influence in a great and undue proportion; but if ever government conceived designs against the company, they would find it much easier to execute them while the proprietors were few and opulent, than when they were numerous, and at the same time independent and possessed of moderate fortunes. This petition produced a motion in the house of commons, "That it does not appear that the proprietors of L. 500 stock in the East India company have been guilty of any delinquency in the exercise of their charter-rights according to the several acts of parliament made in their behalf." This, however, being rejected, their regulating bill passed in the house of commons.

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is disagree-
able to the
company.

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Petition of
the proprie-
tors of 500l.
stock.

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Motion in
their favour
rejected in
the house of
commons.

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commons by a majority of more than six to one. In the house of lords it passed by 74 to 17. The duke of Richmond moved for a conference with the house of commons; but this was refused. He then moved that copies of all the papers which had been laid before the commons should be laid before the lords also; but this being likewise refused, he joined six other members in a protest, the substance of which was, that the whole was a scheme of government to get the power and wealth of the company into their hands; pointing out at the same time the many particular infringements on public and private rights by passing the bill.

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Investigation of the company's affairs by the select and secret committees.

All this time inquiries went on by the select and secret committees; the affairs of the company were investigated from the year 1756, and many witnesses examined concerning them. A report was presented by general Burgoyne, containing many charges of cruelty and rapacity in the conduct of several gentlemen concerned in the management of the affairs of the company; particularly with regard to the deposition of Surajah Dowlah in 1756. This was said to have been the origin of all the evils that had happened since that time. He insisted much on the treachery used in bringing about that revolution, and particularly the fictitious treaty with Omichund; exposing the conduct of lord Clive, who had caused admiral Watson's name to be affixed to that treaty, which the admiral had refused to sign in person*. He concluded with moving for the restitution of all the money received in presents or otherwise in India, while the receivers acted in a public capacity; and at last stated the following resolutions: "That all acquisitions made under the influence of a military force, or by treaty with foreign powers, do of right belong to the state; that to appropriate acquisitions obtained by such means is illegal; and that great sums of money had been obtained by such means from the sovereign princes in India." The general belief that many of the company's servants had acted in a most infamous manner, was at this time so strong, that the above resolutions were carried almost unanimously. Lord Clive defended himself by general protestations of innocence; which, however, gained but little credit, till he entered into a particular refutation of the charges against him. His friends were not of opinion that these were of an atrocious nature, and wished to excuse him by policy, necessity, &c. rather than load him with any great degree of guilt. The treaty with Omichund was justified by necessity. Some said, indeed, that as Omichund had the character of the most accomplished villain in Asia, an Englishman only wished to have a trial of skill with him. This severe sarcasm, however, was a mere piece of wit, without any solid foundation; for the crime, if any there was in that transaction, undoubtedly lay in the dethroning a sovereign prince by means of traitors, not the cheating of these traitors of their reward. Indeed, if once we admit treachery into our dealings at all, it is in vain to pretend any subjection to the rules of justice; for we are already beyond its jurisdiction.

General Burgoyne now moved, "That Lord Clive, in consequence of the powers vested in him in India, had received at various times presents to the amount of L. 234,000 Sterling, to the dishonour and detri-

ment of the state;" but this being rejected after violent debates, the following was substituted: "That Lord Clive did, in so doing, abuse the power with which he was entrusted, to the evil example of the servants of the public." This also being rejected, another was added, "That lord Clive, when he received the sum above mentioned, did at the same time render great and meritorious services to his country." Thus the matter was concluded, and the affairs of the company delivered into the hands of administration, who declared that their regard for its welfare was the sole motive for bringing about this revolution.

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He is acquitted.

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Proceedings in American affairs.

The affairs of the East India company were succeeded by those of America. The ill humour occasioned by the taxes laid on that country has been already taken notice of. The stamp-act had excited among them a spirit of industry, economy, and a desire of serving themselves with their own manufactures, which had never been forgotten. This was at that time, as well as afterwards, imputed to wilfulness, or the discontent of a view, which would afterwards subside of itself, or be suppressed by the voice of the majority; when things would of course revert to their old channel. The trifling tax on tea, however, which had not been repealed, and the allowance given to the company to export what quantities they pleased, now threw matters into a ferment not to be quelled by any means whatever. The various proceedings in America, the tumults, and subsequent war, are fully taken notice of under the article *United States of AMERICA*. Here it only remains to give an account of the manner in which the legislature and people of Great Britain were affected by these events. It has already been remarked, that ever since the conclusion of the peace in 1763 the disposition shown by government to augment the revenue, for which indeed there was at that time an evident necessity, had produced in the popular party of Great Britain a spirit very similar to that manifested by the Americans, though in an inferior degree; so that the patriots of Britain affected to consider the Americans as oppressed by government, and suffering in the same cause with themselves. The destruction of the tea at Boston and other places in America, however, considerably diminished the number of their friends, and made many of those who still adhered much less sanguine in their cause. The matter was announced to parliament by a special message from the throne. Lord North and the other ministers set forth the conduct of the colonists, particularly of the town of Boston, in a most atrocious light, and concluded that now government was perfectly justifiable in any measures they might think proper to redress the wrong, and inflict such punishment on the town as the enormity of the crime seemed to deserve. Opposition did not pretend to exculpate, though it was still attempted to excuse them by deriving all the disturbances in that country from the arbitrary and absurd measures pursued and obstinately adhered to at home. This heavy charge the ministry evaded by drawing the attention of the house to the more important consideration, Whether the Americans were now to be dependent, or independent, on Great Britain? The Boston port-bill being then brought in, was carried, but not without considerable opposition, both within and without doors. A petition was first presented by Mr Bolla, agent for

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Debates on
the Boston
port bill,
and peti-
tions a-
gainst it.

the council of Massachusset's bay, urging an act of queen Elizabeth for the security of the liberty of the colonies. This was presented before the bill had actually made its appearance; but so little regard was paid to it, that, during the very time it lay on the table, the bill was brought in by lord North. After it had passed two readings, that gentleman presented another, desiring to be heard in behalf of the town of Boston, for the council of Massachusset's bay. This was absolutely refused; because, though Mr Bollan was agent for the colony, he was not for the corporation of the town of Boston. Neither could he be so for the council of Massachusset's bay; for as that was necessarily fluctuating, the body which had appointed him was now no longer existing. This appeared very inconsistent to many of the members, and produced a greater opposition in the house than would otherwise in all probability have ensued. A new petition quickly followed from the lord mayor in the name of the natives and inhabitants of North America residing at that time in London. This was written in a more spirited style, and boldly insisted that the bill was illegal, unprecedented, unjust; and that, under such a precedent, no man or body of men in America could have a moment's security; the charge being brought by the enemies of the town, and the punishment inflicted without hearing them in their own defence, or even making them acquainted with the charge; and they concluded with these remarkable words, that "the attachment of America would not survive the justice of Britain." As little regard being paid to this as to the former petitions, and all proposals for a delay rejected, the bill passed both houses without a division; the minority, notwithstanding their opposition, not choosing to dissent publicly from the first step taken by government to reduce the disobedient colonies. That this obnoxious bill might not be sent to America without some mitigation, however, they proposed the repeal of the duty on tea laid on in 1767; but this was also rejected, probably from a vain expectation that the opposition of the Americans was that of a mere tumultuous mob, and that by showing a proper spirit and perseverance the ministry could not fail to come off victorious at last.

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Passes with-
out a divi-
sion.

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Repeal of
the tea duty
refused.

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Protest on
the regula-
ting bill.

The extreme obstinacy shown by ministers in this first instance, undoubtedly proved very prejudicial to their cause, not only by exasperating the Americans, but by rousing the indignation of minority, and making their opposition so violent and determined, that the Americans could not but conclude that they had a very strong party in their favour on this side of the Atlantic. This appeared in every subsequent transaction relating to the colonies. The bill for regulating the government of Massachusset's bay did not pass without a protest, from which we shall only extract the following sentence: "This act, unexampled in the records of parliament, has been entered on the journals of this house as voted *nemine dissente*, and has been stated in the debate of this day to have been sent to the colonies as passed without a division in either house, and therefore as conveying the uncontroverted universal sense of the nation. The despair of making effectual opposition to an unjust measure has been construed into an approbation of it."

The like consequences ensued on passing the act for

the impartial administration of justice. In the protest on this occasion the lords used the following expressions: "The bill amounts to a declaration, that the house knows no means of retaining the colonies in due obedience but by an army rendered independent of the ordinary course of law in the place where they are employed. A military force sufficient for governing upon this plan cannot be maintained without the inevitable ruin of the nation. This bill seems to be one of the many experiments towards the introduction of essential innovations into the government of this empire. The virtual indemnity provided by this bill for those who shall be indicted for murders committed under colour of office, can answer no other purpose. We consider that to be an indemnity which renders trial, and consequently punishment, impracticable. And trial is impracticable, when the very governor, under whose authority acts of violence may be committed, is impowered to send the instruments of that violence to 3000 miles distance from the scene of their offence, beyond the reach of their prosecutor, and the local evidence which may tend to their conviction. The authority given by this bill to compel the transportation from America to Great Britain of any number of witnesses at the pleasure of the parties prosecuting and prosecuted, without any regard to their age, sex, health, circumstances, business, or duties, seems to us so extravagant in its principles, and so impracticable in its execution, as to confirm us farther in our opinion of the spirit which animates the whole system of the present American regulations."

A still greater opposition was made to the Quebec bill, inasmuch that, before it could be carried, the ministers were obliged to drop much of that high and aspiring tone to which they had accustomed themselves in talking of American affairs. The minority contended, that here, without any necessity pleaded, or even suggested, an arbitrary influence was extended by act of parliament to that province, furnishing a dangerous precedent, and an additional instance of the aversion which ministry bore to the rights of the people. They argued likewise in favour of the mode of trial by juries, and thought that the establishment of the Roman Catholic religion there gave it a preference over the Protestant, which was now only to be exercised by toleration. The people at large also were alarmed at the religious part of the bill, and it is not impossible that the suspicions conceived at this time might contribute in some measure to the dangerous insurrections of 1779 and 1780.

At the conclusion of the session his majesty expressed the greatest satisfaction at what had been done, and hopes of the good effects that would attend the new regulations. The reception they met with in America is related in its proper place; in Britain the people seemed to wait the event with indifference, but their bad success with the colonists furnished the minority with new matter of reproach to cast on administration. The parliament in the mean time was dissolved by proclamation, and a very short time allowed for the election of new members; so that if opposition at that time had any strength, they had not now time to exert it. The new parliament met on the 30th of November 1774; when his majesty acquainted the houses that a most daring spirit of resistance still prevailed in Ameri-

Britain.
561
On the im-
partial ad-
ministra-
tion of ju-
stice bill.

562
Debates on
the Quebec
bill.

563
Parliamen-
tary pro-
ceedings in
1774.

ca,

Britain.

ca, notwithstanding the most proper means had been taken to prevent the mischiefs thence arising, and assured them that they might depend on a firm resolution to withstand every attempt to weaken or impair the supreme authority of this legislature over all the dominions of the crown. In answer to this speech the minority demanded a communication of all the letters, orders, and instructions, relating to American affairs; but this being over-ruled, and the address carried as a matter of form, American affairs were delayed, in spite of all opposition, till after the holidays. In the question on the address, the strength of administration was to that of their adversaries as 264 to 73.

564
Lord Chatham's motion for a recall of the troops rejected.

In the beginning of 1775 the minority received a considerable accession of strength by the return of Lord Chatham, who, after long absence, again made his appearance in parliament. He now testified his disapprobation of the measures which had been pursued with regard to America in the warmest terms; moved for addressing the king to recall the troops from Boston; predicted, that if ministers went on in the way they had done for some time, they would make the crown not worth the king's wearing; that the kingdom was undone, &c. All his eloquence, however, proved at this time ineffectual; administration was determined upon forcing the Americans into subjection, and his motion was rejected by 68 to 18.

565
American papers laid before parliament.

Lord North now presented the papers which had been called for by the minority; but lest the publication of particular names should prove detrimental to individuals, only such parts as administration thought proper for public inspection were laid before the house. This was complained of, but to no purpose; and the papers, in their mutilated state, were laid before a committee of the whole house. In the mean time petitions against coercive measures with America had been received from most of the trading companies of the kingdom: which, though highly displeasing to administration, could not be absolutely rejected, though it was fully determined not to yield to their requests in the smallest degree. A committee was therefore appointed to take them into consideration, which was not to take place until the American affairs were also considered. The reason given for this method of proceeding was, that the consideration of commercial matters ought not to interfere with those of the political kind; each of them being sufficiently embarrassing without any other. This delay of hearing these petitions was supposed to be an absolute rejection of them in effect; and so indeed it proved to be, the committee to which they were consigned being humorously called the *committee of oblivion*. The merchants of London, however, were determined not to give up the point until they had exerted themselves to the utmost. They drew up a paper in which they denied the distinction established by ministry. They affirmed that the connection between Great Britain and America was chiefly of a commercial nature, and that the manifold regulations adopted for the mutual prosperity of the colonies and of the mother-country formed the great political chain which united them to one another. Questions of commerce and policy, therefore, with regard to them, ought never to be divided, but examined jointly, and could never be thoroughly understood if considered in any other way.

567
Consigned to the committee of oblivion.
568
Ineffectual remonstrance.

This remonstrance was seconded by all the powers of opposition; but the truth was, that administration had already determined what line of conduct they were to follow, and therefore wished to hear as little as possible on the subject. "War (says Dr Andrews) was now the word; and notwithstanding no weightier reason could be given for not attending to what the merchants had to say, than this very determination, yet that was the very motive that impelled ministers to refuse them a hearing, lest these should make it appear how unwise it was to precipitate the nation into such a measure."

But though there is not the least reason to doubt that administration were now fully determined upon a war, and therefore wished to be troubled with as few objections as possible, they were by no means deficient in arguments for the defence of their own conduct. They alleged that the petitions so much recommended to the attention of the house were principally the work of a factious party. The advantages accruing from the American trade were owing to the dependent situation of the colonies, who now aimed at a superiority over Great Britain, or at least at shaking off entirely the superiority which the mother-country had till now exercised over them without the smallest complaint. It was the advantage of the merchants themselves that was consulted by maintaining that superiority; and the merchants themselves would be the first to feel the bad consequences of its being lost. War and its consequences are no doubt very terrible, but sometimes are necessary, to prevent greater evils. The greatest evil that can befall a trading nation is the loss of its commerce; and were the Americans to persist in their courses at that time for a few years longer, this consequence must inevitably ensue.

It was besides insisted, that though administration were to yield the present contest, the warmest advocates for America could not pretend to say what would be the last of its demands. The Americans aimed in reality at the repeal of whatever appeared obnoxious to their immediate interest: But that and their real interest differed very much. The greatest political evil that could befall them was to be deprived of the political and commercial support they received from Great Britain; and to this they must ultimately submit, if they should ever succeed in the pursuit of that delusive phantom of independence which they now accounted their happiest situation. In short, administration insisted, not without a great show of reason, that the Americans were not to be reclaimed by concessions. Mercantile people indeed might imagine so, from the facility with which concessions would be made, and the speed with which tranquillity would be restored. But tranquillity procured in this manner would last no longer than till the colonies, unfettered by any regulations, perceived, or imagined they perceived, the benefit of dealing with other countries, and carried their own commodities wherever they thought proper. This was the point at which they incontestably aimed, whatever they might pretend to the contrary; for, notwithstanding the boasts they made of the vast business transacted with Britain, it was well known to arise from the immense credit they were indulged with there, and which they could not expect elsewhere.

The honour and character of the nation were now also

Britain.

569
Arguments used in favour of administration.

Britain. also said to be at stake. The British had often taken up arms for matters of less consequence; why then should they now hesitate in a case like the present, where honour and interest both called upon them for the most vigorous and speedy exertions? Formerly it was the custom of the merchants to second the wishes of ministry in this respect, instead of opposing them. The inconvenience of suspending their profits for a time must be submitted to, and their enemies would experience as many if not more of the same kind; and it would be unworthy of the character they had so long sustained to yield to indignities for the sake of profit. The losses above mentioned, however, would be but trifling in comparison of those that would follow in time to come, should Britain from want of spirit give up the assertion of her just rights. This was a policy hitherto unknown in Britain, which had heretofore been noted for the ardour and celerity with which they were maintained.

570
On the petition of congress to the king.

The end of all this altercation was, that the motion in favour of the merchants petitions was rejected by 250 to 89. This point, however, was no sooner discussed, than a violent debate arose about the petition of congress to the king, which had been delivered, and by him referred to parliament. It was argued by administration, that no petition could be received from the continental congress, which was no legal body, and it would be admitting their legality to receive a petition from them; the general assemblies and their agents were the only lawful representatives of the colonies, and none else would be admitted. Opposition replied and argued as much as possible, but to no purpose; and, after an ineffectual struggle, they had the mortification to find that the petition was finally rejected by 218 to 68.

571
Chatham's conciliatory plan rejected.

In the mean time a conciliatory plan was prepared by the earl of Chatham, which was presented on the 1st of February 1775. The intent of his bill, he said, was to settle the troubles in America, and to assert at the same time the supreme legislative authority and superintending power of Great Britain over her colonies. This was to be done by their acknowledging on their part the supremacy of the British legislature and the superintending power of parliament. No taxes were to be levied in America but with the free consent of their assemblies. It asserted a right in the crown to keep and station a military force established by law in any part of its dominions; but declared, that it could not be legally employed to enforce implicit and *unlawful* submission. A congress might also be held, in order to recognize the supreme sovereignty of Great Britain over the colonies, and to settle, at the same time, an annual revenue upon the crown, disposeable by parliament, and applicable to the exigencies of the nation. On complying with these conditions, the acts complained of by congress were to be suspended, with every other measure pointed out as a grievance, and the constitution of their governments to remain as settled by their charters. This bill was, however, deemed at once totally inadmissible, on account of its alleged partiality to America, by the various concessions it enacted, and particularly by empowering the colonies to assemble in congress; a measure which, of all others, was at that time the most

offensive, and supposed to be the most injurious to the British interests. Britain.

Lord Chatham was by no means deficient in arguments in support of his favourite plan; but these, tho' supported by all the powers of eloquence, proved unsuccessful; the proposal was ultimately rejected by 61 to 32. So determined were the majority in giving this an entire rejection, that it was not even permitted to lie upon the table; which, however, may be considered as a piece of indignity offered to that great man, proceeding rather from the indifference with which he had been received at court for some time, than from any real and thorough conviction of the inutility of the plan he proposed.

A new petition was next presented to the house of commons by the proprietors of estates in the West India islands; representing their alarm at the association of the Americans, and their intended stoppage of trade with the British islands; the situation of which, they said, would be very calamitous, if the acts in question were not immediately repealed. The trade of these islands was at that time of the most extensive nature. All quarters of the globe were concerned in it; the returns centered in Britain, and were an immense addition to its opulence, insomuch that the British property there amounted to no less than 30 millions Sterling. But the West Indies, however wealthy, did not produce the necessaries of life in sufficient abundance for their inhabitants. Large importations were continually wanted, which could only be supplied from North America; and were they to be cut off from a communication with that continent, they would shortly be reduced to the utmost distress. Such was the substance of this petition; to which no more attention was paid than had been to the rest. To administration all petitions now appeared to be the contrivance of faction; and it was said, that however inconvenient the coercive measures might be, they ought not to be retarded by the consideration of any temporary losses. As it was necessary, however, to let the nation know the ultimate resolves of administration respecting America, it was at last done by lord North in a long speech, in which the most remarkable circumstances relating to the dispute were enumerated. It was asserted, that universal fermentation, then prevailing in America, proceeded from the unwarrantable arts and practices used to dispose them against the ruling powers in Britain; and asserted, that, notwithstanding all their complaints, the public charges borne by individuals in America were, on the strictest computation, not more than 1 to 50, when compared with what was paid by individuals in England. Nothing, therefore, but a settled determination to quarrel with the parent state could induce the Americans to persist in their disobedience to the lawful injunctions laid upon them, which were neither injudicious nor oppressive; but on the contrary, framed with all possible lenity, and counterbalanced by advantages which were not possessed by Britain. It was therefore a spirit of resistance which animated America, and not a discontent at oppressions which plainly had no existence. For this reason it was proposed to the house to send a greater force to America; and to pass a temporary act, suspending all the foreign trade of the different colonies of New England, and

572
Petition of the West India planters.

573
Rejected.

Britain. and particularly the Newfoundland fishery, until they consented to acknowledge the supreme authority of the British legislature, &c. upon which these restrictions should be taken off, and their real grievances, if any such there were, redressed upon making proper application. New England, they said, was justly singled out upon this occasion, as being the most guilty of the whole. The others, as less faulty, it was hoped, would yield with less compulsion; but the question now was simply, Whether we would at once abandon all claims on the colonies, and instantly give up the advantages arising from our sovereignty, and the commerce dependent on it? or, Whether we should resort to the measures indispensably necessary to ensure both?

574
On the address on the American papers.

An address was now carried, which, in the ideas of opposition, amounted to an absolute declaration of war. The consequences, therefore, were painted out with the utmost freedom, and some even denied the charge of rebellion fixed on the province of Massachusetts bay. The people there, they said, had done nothing but what the constitution allowed: they had resisted arbitrary measures; and the examples so frequently set them at home were sufficient to justify their conduct. The appellation of *rebels*, they said, was dangerous, and might better be spared; it would only serve to render them desperate, and inspire them with a determination to resist to the last, from an apprehension that their lives and properties were forfeited. This last consideration, however, was made very light of by administration. Great stress, they said, was laid upon the union of the colonies, but a very little time would show with how much impropriety. The principles on which they were associated were too self-denying to be supported by human nature, and were too inimical to the interest and feelings of individuals to bind them long together. In other respects this union of the colonies might be viewed with indifference, and even contempt. The natives of America, it was said, were no soldiers; they were averse to military discipline, and incapable of subordination; they were of a slothful and spiritless disposition; uncleanly, liable to sickness, and easily overcome by fatigue. Such people as these would never face a British army; and a very small force would be necessary to put an end to all their projects of independence.

575
On the re-commitment of it.

These were the principal arguments for and against this address, which was carried by 296 to 106: but so important was the subject of it deemed by the minority, that a motion was made for recommitting it, on account of the consequences that would probably result from the prosecution of the measures recommended. A very long and violent debate ensued; the event of which was, that administration contended as usual for the necessity of enforcing obedience with fire and sword. The Americans, they said were become incorrigible through forbearance; lenity was a subject of derision among them, and was imputed to imbecility and fear; they imagined themselves able to abolish the sovereignty of Britain in that country, and were now resolved to do it. It was therefore incumbent on every native of Britain in such a case to stand forth, and vindicate the interest and glory of his country; and it was the duty of parliament and ministry to call forth the whole spirit of the nation to a contest in which

every thing dear to them both in their public and private capacities were so deeply concerned.

Britain.

In this, and some former debates, the danger of being involved in foreign wars on account of the colonies had been insisted on; but this was looked upon by administration to be improbable. It was hardly to be imagined, they said, that foreign powers would behave in a manner so very impolitic as to encourage rebellions in other colonies, which might, in a very short time, become precedents for imitation in their own. The number of friends to government in America was likewise very much relied upon. A proper reinforcement to the troops already there would encourage those to declare themselves who were at present too timid to avow their sentiments: These, if duly supported, would be found to be no inconsiderable number; and when added to the forces stationed among them, would undoubtedly counterbalance the power of the malecontents. This project of arming the Americans against one another was reprobated by opposition more than all the rest. The address itself was a measure replete with barbarity as well as imprudence; tending to put arms in the hands of every man throughout the continent who suspected the designs of the British administration, and to expose to ill usage and ruin every person who was known, or imagined, to be a friend to Great Britain. The Americans were said to aspire at independence; but if any thing could bring this about it would be the conduct of ministry. The most obedient and loyal subjects cannot have patience for ever with a tyrannical government. They will undoubtedly rise at last and assert their rights; and those who style them rebels on that account ought to remember, that oppression not only produces but justifies resistance. It had always been believed by the Americans, without any contradiction from Britain, that internal taxation in America belonged to the assemblies of the colonies, and to them only. There were opinions in all nations, which the legislature would respect, while they produced no bad consequences. This opinion ought not therefore to have been attacked at such an improper season, after having been virtually recognized by the repeal of several acts, and approved by some of the most learned and intelligent people in the kingdom. It was the greatest misfortune that could befall a state, when its rulers endeavoured without any apparent necessity, to alter the system and maxims of governing long adopted, and the utility of which had been confirmed by experience. This was, however, the case with Britain. The mildness and benignity which was wont to direct the measures of former ministers was now laid aside for severity and imperiousness; while implicit obedience was imposed upon the colonists, as the only condition by which they could purchase peace.

The aspersions of cowardice, so largely thrown upon the Americans by the ministerial party, did not pass unnoticed. It was observed, however, that were these ever so just, the very nature of their country would fight for them. By this alone our military enterprises would be retarded and impeded in a considerable degree; while the sinews of war would undoubtedly be greatly relaxed, as the suspension of such a considerable commerce as that of our colonies could not fail to be severely felt.

Besides.

Britain.

Besides all this, the views and principles of ministers were attacked in the most violent manner. They were said to be reviving the old exploded doctrines of hereditary right and passive obedience.—They required the Americans to submit unconditionally to the will of Great Britain, for no other reason but because she was the parent state: but if no better reason could be produced, they could not be justly blamed for their disobedience. The ties between Great Britain and her colonies, however, were of a far more noble as well as more binding nature than even origin and consanguinity. These ties were the constitution transmitted from Britain, and the brotherly assistance hitherto afforded them by Englishmen; and which ought to render the name dear to them. While these ties remained unviolated, there was no room to complain of their behaviour; but they would never submit to despotic authority in Englishmen more than in any others. Such unwarrantable principles rendered it no longer a question, whether the measures of administration should be considered, but whether the ministers themselves ought not to be deprived of the power they exercised so unconstitutionally? And the question was not now between Great Britain and America, but, whether we should give up our colonies or our ministers?

Language of this kind excited the indignation of the ministerial party to a very high degree. They now charged ministry in very plain terms, with the guilt of all that had happened. A factious republican spirit, they said, was gone forth; by which every person who wrote or spoke on the American cause was actuated; and which had not only induced the Americans to commence a rebellion against the parent state, but had filled the house with incendiaries. The final issue of the dispute was, that the recommitment of the address was lost by 288 to 109. The debates were the most violent that had ever been known in the British parliament; and so important was the subject reckoned, that not only the natives of Britain, but even the foreign ministers in London, watched the motions of administration with the utmost anxiety, as considering it a point which might probably give a new face to the affairs of all Europe.

576
Petition
from the
West India
merchants.

All these victories of administration were not sufficient to prevent new enemies from starting up. Petitions had been preparing by the London merchants trading to America, and from those concerned in the West India trade, to be presented to the house of lords. This task was undertaken by the marquis of Rockingham, but he was prevented by a previous motion in favour of the address. A long and violent debate, however, ensued concerning the necessity and propriety of receiving them. The papers on which the address had been founded were said to be partial and mutilated, for which reason the house ought to pay the greater regard to the representation of the merchants; whose testimony, as persons deeply and essentially interested in bringing truth to light, might be depended on with much greater safety. It was urged, that they earnestly desired to be heard before the house took any final determination with regard to America; a refusal would amount to a public declaration, that parliament was resolved to oppose the sense of the petition, right or wrong; and such treatment was in every re-

spect unwarrantable, and no less contrary to sound policy than to equity and good manners.

All these representations, however, had no weight with administration: they affected great sorrow at being obliged to declare that the petition could not be received consistently with the interest of the kingdom; they put the merchants in mind that the American proceedings threatened fatally to diminish the commercial greatness of this kingdom, in which case none would suffer so much as themselves; and they insisted that confidence ought to be put in the wisdom of parliament, as it was not doubted that by properly asserting the supremacy of the British legislature in the manner proposed, all those advantages about which they were so anxious would be secured. They were therefore exhorted to submit to temporary inconveniences, which could not be avoided in the present posture of affairs, though probably they would not be of long duration.

In the mean time matters went on from bad to worse in New England; so that it was soon perceived either that the friends of government in that colony did not exert themselves, or that they were far from being so numerous as had been imagined. In order to make their coercive plan the more effectual, therefore, it was now judged necessary to extend it so that every individual of the colony should become sensible of the punishment. This, it was supposed, would be done by a bill for restraining the four provinces of New England from commerce with Great Britain, Ireland, or the British West India islands; and prohibiting them from carrying on the fishery at Newfoundland. The reasons given for this were in substance the same with those for the others; and indeed both parties had now so much exhausted their arguments, that very little new matter was left for either. Every step taken by ministry, and every proposal made by them, however, produced a violent debate; and though they constantly gained the victory, it was not without the mortification of hearing their principles and conduct reprobated in the most opprobrious manner. In the present instance the bill was carried by 261 against 85; but a petition against it was quickly offered by the London merchants concerned in the American trade, setting forth the danger that would accrue to the fisheries of Great Britain from such a prohibition.

From the evidence brought in support of this petition it appeared, that ten years before the American fisheries had been in such a flourishing state, that the four provinces of New England alone employed near 46,000 ton of shipping and 6000 seamen; and that the produce of their fisheries in the foreign markets amounted in the year 1764 to upwards of L. 320,000. Since that time they had greatly increased; and what rendered the fisheries particularly valuable was, that all the materials used in them, excepting only the timber for building the vessels, and the salt for curing the fish, were purchased in Britain, and the nett proceeds of the trade were also remitted thither. It appeared also, that it would not be practicable to transfer these fisheries to Halifax or Quebec, though ever so much encouragement were given to either of these places, as they had neither vessels nor people to man them, and would never be able to procure supplies of

Britain.

577
Rejected.

578
On the new
England re-
training
bill.

579
General ac-
count of the
American
fisheries.

⁵⁸⁰ Britain. seamen from New England on account of the aversion of the inhabitants to the government of these two provinces.

Some other circumstances were likewise urged as strong reasons against this bill; particularly the commercial concerns of the city of London with New England (to which alone the colony stood indebted for near a million), and the bad consequences of it to the people of Nantucket. This is a barren island, lying off the coast of New England, about 15 miles long, and three broad, containing about 6000 inhabitants, almost all quakers. The natural produce of this island, it was alleged, could not maintain 20 families; but the industry of the inhabitants was such, that they kept 130 vessels constantly employed in the whale-fishery, which they carried on in the north seas, to the coasts of Africa and Brazil, and even as far as the Falkland islands and the shores of Terra Magellanica. These people, it was said, ought undoubtedly to have been exempted from the common calamity, were it only from the applause due to so much industry and resolution.

The instance of Nantucket was so strong, that administration, with all their obstinacy, were obliged to relax a little; and, of their own accord, afforded them the relief they had such just reason to expect. That the petition in the main might prove unsuccessful, however, another was presented by the inhabitants of Poole, the tenor of which was directly opposite to that of the city of London. In this it was set forth, that the restrictions proposed by the bill would not prove detrimental to the trade of England, which was fully able, with proper exertions, to supply the demands of foreign markets. The advantage of the Newfoundland fishery more than that of New England to this country was, that it bred a great number of hardy seamen peculiarly fit for the service of the navy, while the New England seamen were, by act of parliament, exempt from being pressed. It appeared also from the examination of witnesses taken in support of this petition, that the fishery from Britain to Newfoundland employed about 400 ships, amounting to 360,000 tons, and 2000 shallops carrying 20,000 tons and navigated by as many seamen. Each season produced 600,000 quintals of fish, and the returns at a moderate rate were valued at L. 500,000.

⁵⁸¹ Remark-
able protest
against the
restraining
bill. This bill was debated with great animosity in the house of peers, and produced a remarkable protest, in which the measures of government were spoken of with great severity. "That government (said they) which attempts to preserve its authority by destroying the trade of its subjects, and by involving the innocent and guilty in a common ruin, if it acts from a choice of such means, confesses itself unworthy; if from inability to find any other, admits itself wholly incompetent to the end of its institution." They also reprobated in severe terms the assertion already mentioned, that the Americans wanted spirit to resist, and that Britain would find them an easy conquest. Such language was represented as altogether void of foundation, and the mere effect of party spirit and resentment. It was also the more imprudent and unadvised, as tending, in case of coercive measures, to slacken the care and solicitude with which they ought to be pursued, and to occasion remissness in those to whom they might be

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entrusted, from a persuasion that the enemy to be encountered was not to be feared, and could easily be overcome.

The final resolution of reducing the colonies by force being now taken, it became necessary to make proper preparations for the purpose; and in this the conduct of administration was little less censured than in other respects. As the abovementioned opinion, that the Americans were timid and incapable of becoming soldiers, prevailed greatly at that time, a force of 10,000 men was judged sufficient to reduce the province of New England to obedience. This was vehemently opposed by the minority. They insisted that the force was totally inadequate, and only calculated to produce expence to no purpose. The first impression, they very justly observed, ought to be decisive, if possible; and in order to render it so, it was necessary to send such a fleet and army as might ensure the confidence of the public, and be certainly capable of surmounting all obstacles. Many of the friends of administration were of the same sentiments in this respect; and the only reason assigned for acting otherwise was an hope that the Americans would, upon more mature consideration, desist from their opposition. That they might the more readily be induced to this submission, lord North's conciliatory proposition was formed. By this it was enacted, that when the governor, council, and assembly of any of the colonies, should propose to make a provision for the common defence, &c. and if such provision should be approved of by the king in parliament, the levying or imposing of taxes on that colony should then be forborne, those duties excepted which it might be expedient to impose for the regulation of commerce; the nett produce of which should be carried to the account of the colony where it was raised. But this proposal, though highly extolled by the friends of administration, was no less reprobated by minority than the others had been. It was said to be insidious, and calculated for the purpose of raising a revenue, which was now said to be the object of ministers. There was no essential difference between the present and former modes of taxation. The colonies were as effectually taxed without their consent by requiring them to pay a stated sum, as by laying a number of duties upon them to the same amount. There was besides a capital deficiency in the proposal, viz. that no sum was specified; so that the Americans were left totally ignorant of what the demands of Britain might be. After a long debate, however, the question was carried in favour of administration by 274 to 88.

The like fate attended a petition to the throne from the island of Jamaica. Instead of relaxing any thing of their severity, the ministry now included the southern colonies in the restrictions laid on New England. Still, however, the petitioners were indefatigable in their endeavours to be heard. The West India merchants and planters seconded their last petition by a large detail of circumstances relating to the British islands in that part of the world. This affair was conducted by Mr Glover, a gentleman equally celebrated for his literary talents and commercial knowledge. From his investigations it appeared, that, exclusive of the intrinsic worth of the islands themselves, their stock in trade and other property amounted to no less than

⁵⁸² On the force
to be sent to
America.

⁵⁸³ By Lord
North's
conciliatory
bill.

⁵⁸⁴ Ineffectual
endeavours
of the West
India plan-
ters.

Britain.

585
Immense
value of
these
islands.586
All concili-
atory pro-
posals not
only ineffec-
tual but de-
trimental.587
Extreme
violence of
both par-
ties.588
Misrepres-
entations
on both
sides.

than 60 millions; the exportation to Britain had of late been near 200,000 hogsheds and puncheons of sugar and rum, amounting to no less than four millions in value; the direct revenue arising from which was 700,000 pounds, besides that which accrued from the collateral branches depending upon it. All this, however, was urged in vain. Conciliatory proposals were made by Mr Burke and Mr Hartly, but they were rejected by great majorities. These proposals, indeed, instead of serving the cause they were meant to promote, did the very reverse. A dread was entertained of the consequences which might ensue from the republican opinions now so prevalent in the colonies, and all partiality towards them was looked upon in such a criminal light, that their opponents became deaf, on many occasions, to the voice of reason and humanity when urged in their behalf. On the other hand, the favourers of America, urged on by a furious zeal, and even resentment against those whom they looked upon to be promoters of arbitrary measures, erred equally in their opposition to ministry. This violent party spirit appeared not only among the people at large, but broke forth with the utmost fury in parliament, where the debates often resembled the railings of Billingsgate rather than the deliberations of the first assembly in a great and powerful nation.

In this temper of mind it is no wonder that the state of affairs was scarce ever truly represented by either party. Government continued to enact new laws, now in vain, against the Americans; their antagonists opposed these in a manner so little different from what has been already related, that any farther account of the debates would be as unentertaining as tedious. Other petitions were presented and treated with neglect. The increase of union and preparations for war among the colonists were by the ministerial party treated as the mere commotions of an headstrong mob; and by the other as an association of an injured and virtuous people, who were about to found a mighty empire in the west, while Britain was to sink in utter disgrace and contempt by their mere secession, without making any account of their exploits in the field, which could not fail to equal those of the heroes of antiquity. On the same principles the event of the skirmish at Lexington was magnified by the one into a "disgraceful defeat" on the part of the British; and by the other treated with absolute unconcern, as if no regard whatever was to be paid to it, nor any inference drawn from thence concerning the fate of the war in general. Thus also the battle at Bunkers Hill, and all the transactions of the year 1775, were unfairly stated by both parties; and the only consequence ensuing from these misrepresentations was the inflaming to a violent degree the resentment betwixt the two parties; one of which depressed the Americans to the rank of consummate poltroons, while the other exalted them almost to that of demigods.

While these altercations continued to agitate the minds of the superior classes of people in Britain, the middle and lower ranks remained in a kind of indifference, or rather were against the proceedings of ministry. This opposition could not indeed influence the councils of the nation, but in other respects it proved very

troublesome. The levies were obstructed, and the recruiting service was never known to go on so heavily; numbers of people of that description not only refusing the usual proffers, but even reprobating the cause in which they were solicited to engage. Besides this, several officers of high rank showed a great aversion to the service. Lord Effingham, who had distinguished himself by his opposition to ministerial measures, resigned the command of his regiment rather than fight against the cause he had espoused so warmly. His example was followed by that of several other officers; and it is not to be doubted that, while this step conferred upon them a very considerable share of popularity, it excited in the minds of ministry an equal degree of resentment. Lord Effingham, in particular, received the public thanks of the city of London and Dublin; both of which showed an extreme aversion to the commencement of hostilities with America. The former, indeed, could scarce restrain themselves within any bounds of moderation. After the affair at Lexington they framed a remonstrance and petition, animadverting in the most severe manner on the ministry and parliament; and it was not without the greatest difficulty that the more moderate party procured one to be drawn up, under the name of an "humble petition," couched in less reprehensible terms.

In the mean time several inconveniences began to be felt in different parts of the nation. The suspension of the sale and purchase of negro slaves in the West Indies and in North America, and the prohibition to export arms and gunpowder, had greatly impeded the African trade from Bristol and Liverpool. In consequence of this, a great number of ships which formerly sailed from these ports had been laid up, and near 3000 sailors belonging to Liverpool dismissed from service. Their situation soon rendered them riotous; and it was not without the assistance of the military that they were quelled. These distresses, however, made no impression on administration; who having once laid it down as a maxim, that the subjection of America was the greatest political good that could happen to Britain, were, in a consistence with their own principles, obliged to overlook every disaster that might happen in the mean time as a temporal inconvenience, which ought not to be regarded in the prosecution of a great and magnificent plan.

But whatever might be the views of administration in this respect, it was far otherwise with the generality of the nation. They felt the present inconveniences severely, while the subjugation of America presented them with no solid foundation to hope for an equivalent. It was with the utmost satisfaction, therefore, that they received the news of Mr Penn's arrival in 1775, with a new petition from the congress to be presented to the king; after which he was to give it to the public. Their expectation, however, was soon disappointed. The petition was delivered to lord Dartmouth on the first of September; and in three days it was replied, that no answer would be given to it. This laconic procedure excited no small surprise, as it was universally allowed that the language of the petition was respectful, and that it expressed the highest desire of peace and reconciliation. Lord Dartmouth's answer, therefore, could not but be considered as a final renunciation

Britain.

589
Resignation
of lord Ef-
ingham
and other
officers.590
The city of
London re-
sents the
conduct of
ministry.591
Distresses
of the na-
tion in con-
sequence of
the Ameri-
can war.592
Last peti-
tion of con-
gress reject-
ed.

Britain. renunciation of all friendly intercourse with the colonies, and which would drive them into a connection with foreign powers; a resource at which they themselves had hinted when they first took up arms. It was also thought not only to be injudicious in itself, but very ill-timed, and not at all consistent with the situation of the affairs of Britain at that time. On the other hand, the friends of administration insisted, that the petition offered nothing that could in a consistency with the dignity of the British empire be taken any notice of. Instead of professing any repentance for their own conduct, they had offered stipulations, and even required concessions on the part of Britain. It was likewise said on the part of administration, that fear had a share in framing the proposals now held out. The Americans were very sensible, that though the first steps taken by Britain had not answered the purpose, much greater efforts would quickly follow; and that, without being allowed some time, it was impossible they could bring their matters to bear. The petition, therefore, might be considered as written with a view to procrastinate matters, which was by no means admissible on the part of Britain. The colonies were already well apprized of the conditions on which they would be restored to favour; and had it at any time in their power to put a stop to the operations of war by accepting these conditions: but it would be imprudent to stop the military preparations upon such an uncertain expectation as the petition from congress held out. It was also plain, that a great majority of the nation approved of the measures of government; for addresses were received from all quarters, recommending, in the most explicit manner, a vigorous exertion against America.

593
Revival of
the distinc-
tion and a-
nimosity
betwixt
whigs and
tories.

The rejection of this petition inflamed the minds of both parties more than ever against each other. The obsolete distinction of *Whig* and *Tory* was now revived, and that with such animosity, that Britain itself, as well as America, now seemed in danger of becoming a seat of war and bloodshed. The tories were accused as the promoters of those sanguinary addresses already mentioned. They were said to be the great misinformers of government; and the false representations they industriously procured from all quarters had contributed more than any thing else to inflame the animosity and produce the civil war. They were upbraided with their attachment to the Stuart family. England, it was said, had, through their machinations, been made a scene of blood in the last century; and had been perpetually tottering on the brink of ruin from the restoration to the revolution. At that time indeed the more sensible part of the nation, wearied out with perpetual attempts to enslave them, took the resolution of expelling an ill-advised monarch, whom nothing could prevent from pursuing their pernicious plans to his own ruin. But the tories were an incorrigible race, who could not be cured even by experience; for though they had seen repeated instances of the mischief attending their plans, they adhered to them with as great obstinacy as if the greatest benefits had on all occasions accrued from them. Dissension at home and disgrace abroad had been the constant attendants of their councils; while the only objects they ever had in view were the establishment and propagation of their own tenets; for these alone they laboured, the honour

and interest of the nation being entirely out of the question. These they would willingly sacrifice to the points above mentioned; and as an instance of the effects of their councils, the treaty of Utrecht was mentioned. Here, said their antagonists, the fruits of a triumphant war, carried on for twelve years, were lost at once by those feuds which the tories occasioned thro' their restless endeavours to compass their iniquitous projects.

On the other hand, the tories said that the whigs were the genuine descendants and representatives of those republican incendiaries who had in the last century overturned the constitution and desolated the kingdom. They pretended indeed to assert the liberty of Britain; but under this pretence they wished to engross all the authority to themselves, as might easily be proved by an impartial examination of their conduct in the unhappy times alluded to. In the present dispute the principal question was, Whether the king and parliament, when united, were to be obeyed or resisted? The tories insisted that they were to be obeyed; the whigs that they were to be resisted. The truth was, therefore, that there were two parties in Britain; the one of which was of opinion that the colonies owed obedience to Great Britain in all cases whatever, and that in case of refusal they ought to be compelled to obey; but the other, though it acknowledged the same obligation on the colonies, thought it was unadvisable to force it. The only constitutional method of deciding this question was by an appeal to parliament. That appeal had already been made, and parliament had determined on compulsion. The decision ought therefore to be considered as that of the voice of the nation; and were a parliamentary majority to be viewed in any other light, all things would fall into confusion, and no rule of government remain. The doctrines of the whigs were also said to be inadmissible in sound policy. Authority, sovereign and uncontrolled, must reside somewhere; and allowing every charge of bribery and corruption (which were brought by the other party most liberally) to be true, it were still better to be governed in some instances by such means, than to have no government at all. This must at last be the case were continual appeals to be made to the people; as they would undoubtedly be followed by perpetual broils at home as well as disasters abroad.

To these violent bickerings at home, some very serious commercial misfortunes were now added. It had been represented as very probable, during the last session of parliament, that the bill for depriving the people of New England of the benefits of the Newfoundland fishery, would redound greatly to the interest of Great Britain, by throwing into her hands alone the profits which were formerly divided with the colonies. This expectation, however, proved totally void of foundation. The number of ships fitted out that year was scarcely greater than usual. The congress had also prohibited them from being supplied with provisions; so that not only those on board the ships, but even the inhabitants on the island of Newfoundland itself, were in danger of perishing. Many of the ships were therefore obliged to go in quest of provisions, instead of prosecuting the business on which they came. On the whole, therefore, instead of any increase, the profits of

Britain.

594
Misfor-
tunes of
the New-
foundland
fleet.

Britain. the fishery suffered this year a diminution of near 500,000 l. Along with this, some natural causes co-operated, which, by the more superstitious, were considered as the effects of divine wrath. A most violent and uncommon storm took place in these latitudes during the fishing season. The sea rose full 30 feet above its ordinary level; and that with such rapidity, that no time was allowed for avoiding its fury. Upwards of 700 fishing boats perished, with all the people in them; and some ships foundered, with their whole crews. Nor was the devastation much less on shore, as the waters broke in upon the land, occasioning vast loss and destruction.

595
Violent and
destructive
storm.

596
Ineffectual
petitions,
&c.

597
Difficulty
of procu-
ring fo-
reign suc-
cours.

598
France and
Holland e-
spouse the
American
cause.

599
Auxiliaries
obtained
from Hesse
and Brunf-
wick.

By these misfortunes, the general stagnation of commerce, and the little success that had hitherto attended the British arms, the mercantile part of the nation were thrown into despair. Petitions were poured in from all quarters, the contents of which were similar to those already mentioned, and their reception exactly the same. Ministers had determined on their plan; and the only difficulty was, how to put it in execution as quickly as they desired. For this purpose, application was made to the petty states of Germany, who are wont to hire out their forces, and who had frequently sent auxiliaries to Britain in former cases of exigency. At present, however, the scheme met with considerable difficulties, occasioned by the distance, as well as the danger, of the desertion of the mercenaries. The princes were likewise alarmed at the appearance of losing so many subjects for ever; while the latter were no less startled at the proposal of being transported across the ocean into a new world, there to be exposed to all the miseries of war, with very little hope of ever seeing their native country again. Other resources, however, were devised, by calling in the assistance of the Hessians, and obtaining from Holland that body of Scots troops which had been so long in their service. But in both these views administration were disappointed. All the states of Europe looked upon Britain with an invidious eye, though none so much as Holland and France; these being the two powers who had most reason to hope for advantage from the quarrel. A very strong party in Holland contended for the American interest. Pamphlets were daily published at Amsterdam in justification of the colonies: their case was compared with that of the Netherlands in former times; and they were exhorted to persevere in their claims against the pretensions of Britain. Her they represented as insatiably covetous of wealth and power, and desirous of seizing every thing she could. She was also taxed with being of a domineering disposition; and that, since her successes in the war of 1755, she had become intolerable, not only to her neighbours, but to the whole world: nay, that even during the war she had exercised an absolute sovereignty at sea, and did not scruple to avow a right and title to rule over that element.

But though these powers thus early expressed their hostile disposition towards Britain, it was otherwise with the princes of Hesse and Brunswick; by whom, and some other German princes of inferior note, a considerable number of troops were supplied. At the same time, that as many British forces as possible might be employed, large draughts were made from the garrisons of Gibraltar and Minorca, who were supplied in

return with an equal number of men from the electorate of Hanover. In justice to the ministers, indeed, it must be owned, that they prosecuted the scheme they had undertaken with all possible vigour; insomuch that the expences already began to occasion considerable alarm. This was owing, in the first instance, to the bad success of the British arms, which occasioned a demand on this country altogether unlooked for. It had always been supposed, that the British army would be completely victorious; or at least would remain so far masters of the field, that they could easily command what supplies of fresh provisions were necessary. Instead of this, they were now cooped up in such a manner as to be actually in danger of perishing for want. The supplies, therefore, of necessity, were sent from Britain; and indeed the exertions for their relief were such as must give high ideas of the opulence and spirit of the British nation. For these troops there were shipped no fewer than 5000 live oxen, 14,000 sheep, with a proportionable number of hogs, immense quantities of vegetables, prepared with all possible care; 10,000 butts of small beer, and 5000 butts of strong beer. Some idea of the expences of these articles may be obtained from an account of what was paid for articles trifling in comparison of the above. For a regiment of light horse in Boston, L. 20,000 were paid for oats, hay, and beans. The articles of vinegar, vegetables, and casks, at no less; and every thing else in proportion. The contingencies occasioned by military operations amounted to near L. 500,000. The prodigious expences, therefore, of maintaining an inconsiderable armament at such a distance, could not fail to give a very unfavourable opinion of the war at large, and justly raise suspicions, that even the treasures of Britain would not be able to defray the expence. One advantage, however, was derived from such immense profusion; the price of every thing was augmented; that of shipping particularly rose one-fourth in the ton: and though the profits made by contractors and their numerous friends were complained of, the benefits which accrued to multitudes employed in the various branches of public business seemed in some measure to make amends for every thing.

Misfortune, however, seemed now to attend every scheme in which Britain engaged herself. Some part of it, indeed, in the present case, might be derived from mismanagement. The sailing of the transports was delayed so long that their voyages were lost. They remained for a long time wind-bound; and, after leaving port, met with such stormy weather, that they were tossed to and fro in the channel till most of the live stock they had on board perished. After clearing the coast of England, their progress was retarded by a continuance of bad weather. They were forced by the periodical winds from the coast of America into the ocean. Some were driven to the West Indies, others were captured by American privateers, and only a very few reached the harbour of Boston, with their cargoes quite damaged, so that they could be of little or no use. Notwithstanding the immense supplies above mentioned, therefore, a subscription was set on foot for the relief of the soldiers, as well as of the families of those who died in the service. This was liberal on the whole, though many refused to contribute,

Britain.

600
Vast sums
expended to
supply the
garrison of
Boston.

601
Almost all
the Boston
stores de-
stroyed or
taken.

Britain. bute, from their disapprobation of the cause; and bitter complaints were made of want of economy throughout the whole American department.

602 Violent animosities betwixt the two parties. All this time the violent animosities between the parties continued; the desire of peace was gradually extinguished on both sides; and the foundation laid of an enmity scarce ever to be extinguished. Each seemed to be seriously of opinion that the other would willingly ruin the nation if possible; a remarkable instance of which was the commitment of Stephen Sayre, Esq; banker (one of the sheriffs of the preceding year), to the tower for high treason. The accusation laid against him was no less than that of having formed a design to seize his majesty as he went to the house of lords: but the scheme itself, and the method in which it was to be executed, appeared both so ridiculous, that the prisoner was very soon discharged; after which he commenced a process against lord Rochfort for false imprisonment.

603 Mr Sayre committed to the Tower. With respect to the parliamentary proceedings during this period, very little can be said, further than that every measure of administration, whether right or wrong, was violently opposed. The employment of foreign troops, and admitting them into the fortresses of Gibraltar and Minorca, were most severely censured, as being contrary to the bill of rights. Administration contended that this bill only forbade the introduction of a foreign military power into the kingdom during peace; but the times were not peaceable, and the introduction of the troops was evidently with a view to quell a rebellion. The force designed for the conquest of America was then declared to be inadequate to the purpose; but it was replied on the part of ministry, that the design was to conciliate, not to conquer. The force (25,000 men) was sufficient to strike terror; and though this should not instantly be produced, conciliatory offers would still be held out after every blow that was struck.

604 Parliamentary debates. In the mean time the Americans, sensible of the dangerous situation in which they stood, exerted themselves to the utmost to dislodge the British troops from Boston. This being at length accomplished in March 1776, they proceeded to put their towns in the most formidable state of defence; insomuch that they seem, if properly defended, to have been almost impregnable. This was evident from the repulse of Sir Peter Parker at Charlestown: But they did not exert equal spirit in the defence of New York; where, besides losing the town, they received such a defeat as seemed to threaten their affairs with total ruin. See AMERICA.

605 Military operations of the Americans. In this view it appeared to the generality of the people in Britain. The successful campaign of 1776 was looked upon as so decisive, that little room was left to suppose the Americans capable of ever retrieving their affairs. Opposition were much embarrassed, and now almost reduced to the single argument of the interference of foreign powers, which they had often unsuccessfully used before. Besides this, indeed, the obstinacy of the Americans in refusing the offers of lord Howe, even at the moment of their greatest depression, seemed to be a very bad presage. The strength of ministry, however, now became so decisive, that whatever they proposed was immediately carried. The number of seamen for 1777 was augmented to 45,000, and upwards of five millions voted for the expence of the navy, and to discharge its debt. The expences of

the land-service amounted to near three millions, besides the extraordinaries of the former year, which amounted to more than 1,200,000; and though this vast profusion became the subject of much complaint and animadversion, the power of ministry silenced every opposer.

607 Britain. But however administration might now triumph, their exultation was but of short continuance. The misfortune of general Burgoyne at Saratoga threw the whole nation into a kind of despair, and reduced the ministry to the greatest perplexity. The great difficulty now was to contrive means for raising a sufficient number of forces to carry on the war; but from this they extricated themselves by what must be allowed a masterly contrivance. This was the encouraging levies for government service by cities and private persons; and as the design was kept a profound secret before the Christmas recess, they were not disturbed by the dangerous clamours of opposition. The recess was purposefully extended in order to give time for the scheme to take effect; and before parliament met again it was actually accomplished, so that ministers could once more face their opponents without any fear.

608 Perplexity of administration on the news of Burgoyne's defeat. They extricated themselves with great dexterity. Another and more weighty consideration, however, now occurred. The European states in general had long beheld the grandeur of Britain with an invidious eye. The news of the disaster at Saratoga was therefore received among them as those of the defeat of Charles XII. at Pultowa was among the powers whom he had so long commanded. Of all these the French, for obvious reasons, were the most active in supporting the Americans. Numbers of the young nobility were eager to signalize themselves in the American cause; and among the rest the marquis de la Fayette, a young nobleman of the first rank and fortune. Impelled by an enthusiastic ardour in favour of the American cause, he purchased a vessel, loaded her with military stores, and sailed in her with several of his friends to America, where he presented his services to congress. From them he met with a most gracious reception, and was invested with a command, in which he lost no opportunity of distinguishing himself. Besides this nobleman, several other officers from France and Germany actually entered the American service, and by their military talents greatly contributed to the exertions which the colonies were afterwards enabled to make.

609 The French resolve to assist America. This assistance, however, would have been but trifling, had not the French court also interested itself in their behalf; for by the time, or very soon after, the news of general Burgoyne's disaster arrived in Britain, a treaty was on foot between the French court and the United States of America.

610 Even before this time France had showed such an extreme partiality towards the Americans, as might have plainly indicated their design of ultimately assisting them in their national capacity. The encouragement given to the American privateers in all the ports of France had produced strong remonstrances on the part of Britain; and an order was at last demanded, that all these privateers with their prizes should depart the kingdom. With this they found it necessary to comply at that time, lest reprisals should be made by capturing their whole Newfoundland fleet then out on the fishery. So many delays, however, were made on various

Britain. various pretences, that not a single vessel was dismissed from any of their ports. So far indeed were the French court from any design of this kind, that in the month of July 1777 the whole body of merchants throughout the kingdom were assured from government that they might depend on protection in their trade with America.

611 Treaty with America announced to the court of Britain. All this time the greatest preparations were made throughout the whole kingdom of France for war; so that the most judicious politicians were of opinion that a rupture with that power should have immediately followed the commencement of hostilities with America, and for which the behaviour of the former furnished abundant reasons of justification. Whatever might have been the motives of the British ministry, however, it is certain, that in defiance of probability, even when joined by the most acrimonious censures of opposition, they continued to pretend ignorance of any hostile intentions in the court of France, until that court of its own accord thought proper to announce them. This was done by a formal notification to the court of Britain in the month of March 1778, and that in the most mortifying terms. In this declaration it was announced, not only that a treaty of friendship and commerce was concluded betwixt France and America, but Britain was insulted with being told that America was actually in possession of independency, as if the former had already exerted her utmost efforts without being able to reduce them. A merit was also made of having entered into no commercial stipulations in favour of France exclusive of Britain. Nothing, therefore, could be more offensive; and though it could not decently be said on the part of the French monarch that he wished for war, yet his pacific intentions were conveyed in such haughty terms, that the whole could only be considered as a declaration of those hostilities which he pretended to avoid.

612 Severe charges against administration. Both parties now united in their opinion that a war with France was unavoidable; but they were not for that reason any farther advanced towards a reconciliation. It must be owned, indeed, that the minority had now, according to their own account, received very great provocation. They had from the beginning reprobated the American war, and prognosticated its bad success. In this they had been over-ruled, and the character of the Americans represented in such a manner as almost to preclude the idea of their being able to resist. They had resisted however; and by destroying or taking prisoners a whole army, verified those predictions which had been so often treated with ridicule. The popular party had, times without number, insisted in the most earnest manner for some kind of concession towards America; but this had constantly been refused with an unparalleled and inveterate obstinacy. They now saw these very concessions offered to America after the defeat of Burgoyne, which, had they been granted in time, would have prevented all the mischief. Added to all this, the expences for the ensuing year had been hurried through the house before the Christmas vacation; the levies had been raised by subscription without consent of parliament at all; yet both these proceedings had been determined to be strictly legal and constitutional. Every inquiry into the measures of government had been frustrated; and one into the state of the nation in general, which could

not be absolutely rejected, was rendered ineffectual by delays and evasion. Lastly, they now saw their country involved in a foreign war with a nation well provided for all emergencies, while we had supinely suffered them to go on, without making the least effort to put ourselves in a proper state of defence.

613 Removal of the ministers insisted upon. For these reasons opposition insisted that the present ministry ought no longer to be trusted with the management of public affairs. An acknowledgement of the independence of America was now by many supposed to be the only rational step that could be taken, which might now be done with a good grace, and which we would unavoidably be obliged to take at last whether we would or not. By acknowledging this independence before they had time to enter into exclusive engagements with France, their trade would be open to all the world. This of course would lessen their correspondence with France, and leave them at liberty to form such connections as they thought most proper. The ministerial party, however, still insisted on vigorous measures, representing it as a spiritless and disgraceful measure to bend beneath the power of France, and setting forth the resources of Great Britain as sufficient to resist the efforts of all her enemies. The dishonour of leaving the American loyalists exposed to the resentment of their countrymen was also set forth in the strongest manner. These, by very intelligent people, were said to be by far the greater number. Were it not more eligible, on the very strength of such an affirmation, to make trial of its veracity, and to put arms into their hands? Whatever the danger of the experiment might be, we could not abandon them without exposing our reputation, and losing that character of fidelity to our engagements for which we had hitherto been so justly respected. Unanimity in the present case was strongly, and indeed very justly, insisted upon; but when opposition complained of some occult irresistible influence by which the councils of the nation were directed, in despite of every suggestion of reason and argument, the charge was denied in the strongest manner, and ministers disclaimed every motive of their conduct, excepting that of an internal conviction of its own rectitude.

614 Invasion threatened by the French. Notwithstanding the violence of these altercations, however, the greatest courage and steadiness was manifested by the cool and deliberate part of the nation. The French resolved in the first place to excite a general terror by threatening an invasion. This was evidently impracticable, without their procuring first the superiority at sea: yet as multitudes in the country were apt to be terrified by the very mention of a French invasion, orders were issued to draw out and embody the militia, which was then composed of men in every respect as well exercised and disciplined as any regular troops. It was complained, however, that a French squadron of 12 ships of the line had sailed from Toulon without any obstruction, under the command of the count d'Estaing. The most grievous apprehensions were entertained from the great inferiority of lord Howe's naval force, which might expose him to a total defeat, and the whole fleet of transports to be taken or destroyed by the enemy. But whatever might have been the probabilities in this case, it is certain that either the fortune or conduct

Britain. of this commander were such, that no exploit of any great consequence was ever performed by him. That matters, however, might be put in the best situation possible, addresses were moved for the recalling of the fleets and armies from America, in order to station them in places where they might contribute more effectually to the defence of the kingdom. This was opposed not only by administration, but even by some of the most popular members of opposition themselves. Of this opinion were lord Chatham and the earl of Shelburne; the former of whom resisted it with a vehemence of speech peculiar on this occasion.

616
Exploits of
d'Estaing.

The operations of the French in America, with the various successes of the war, are related under the article *United States of AMERICA*. Here we have only to take notice, that d'Estaing having failed in his attempt on the British fleet at New York, and in assisting his allies in their attempt on Rhode Island, as well as having by other parts of his conduct greatly disgusted them, failed for the West Indies, where he unsuccessfully attacked the island of St Lucia*. Being repulsed in this attempt, he sailed to the island of Grenada, which he reduced, treating the vanquished in a very cruel manner†; while a body of troops dispatched by him also reduced the island of St Vincent.

* See St
Lucia.

† See Gre-
nada.

617
Engage-
ment be-
twixt him
and admi-
ral Byron.

By this time the French admiral was powerfully reinforced; so that his fleet consisted of 26 sail of the line and 12 frigates. During the time he was employed at Grenada, admiral Byron with the British squadron was accompanying the homeward bound West India fleet till out of danger; after which he sailed with a body of troops under general Grant for the recovery of St Vincent; but before they could reach that island, certain intelligence was received of the descent at Grenada. On this they steered directly for that island, where they encountered the French fleet without hesitation, notwithstanding the great superiority of the latter. At this time the French squadron amounted to 27 sail of the line and seven frigates; while that of Britain consisted only of 21 line of battle ships and one frigate. The British admirals, Byron and Barrington, endeavoured to bring the enemy to a close engagement, but this was as studiously avoided by d'Estaing; and such was the dexterity and circumspection with which the latter conducted matters, that it was only by seizing the transient opportunities of the different movements occasioned by the wind and weather, that some of the British ships could close in with their antagonists. Even when this was the case, the engagement was carried on upon such unequal terms, that the British ships were terribly shattered. For some time captains Collingwood, Edwards, and Cornwallis, stood the fire of the whole French fleet. Captain Fanshaw of the *Monmouth*, a 64 gun ship, singly threw himself in the way of the enemy's van to stop them. Several of the British ships forced their way to the very mouth of St George's harbour on the island of Grenada: but finding it in the hands of the French, an end was put to the engagement; nor did the French care to renew it, though the British ships had suffered very much.

618
Bravery of
some Eng-
lish cap-
tains.

D'Estaing now having received fresh reinforcements, set sail for the continent of America, after convoying the homeward bound fleet of French merchantmen in

their return from the West India islands. His disastrous attempt on the town of Savannah, with the subsequent discord betwixt him and the colonists, are related under the article *United States of AMERICA*. Here we have only to take notice, that thus the fears which had been excited by the superiority of the French in the West Indian seas were effectually dissipated. The islands of Dominica, St Vincent, and Grenada, were indeed lost; the first being taken by the marquis de Bouille, governor of Martinico, and the two last by d'Estaing as already related*: but these successes were balanced by the failure of the French commander in every other enterprise; by his terrible disaster at the Savannah; and by the acquisition of St Lucia, which was taken in the year 1778 by admiral Barrington and generals Prescott and Meadows†. In other parts of the West Indian seas also the honour of the British arms was very effectually supported by the bravery and vigilance of the commanders on that station. Here admiral Hyde Parker, assisted by admiral Rowley, kept the enemy in continual alarm, and intercepted the trade of the French islands in such a manner as greatly distressed them. Three large frigates dispatched by count d'Estaing after his failure in America were taken, and a great part of a convoy seized or destroyed in sight of M. de la Motte Piquet's squadron in the harbour of Port Royal at Martinico, the admiral himself having narrowly escaped. He had sailed out of that harbour, in order to favour the escape of the convoy already mentioned; which having partly effected, he withdrew; but was pursued so closely, that he had scarcely time to shelter himself under the batteries on shore.

These successes, which happened in the year 1778, 1779, and beginning of 1780, kept the event of the war pretty much in an equilibrium on the western seas and continent; but in the mean time the most unhappy dissensions prevailed through every department of the British government in Europe, which threatened at last to involve the whole nation in confusion and bloodshed.

Among other charges brought by the members in opposition against the ministry, that of neglecting the navy had been one of the most considerable; nor indeed does it appear that the charge was altogether without foundation. Without a fleet, however, it was now impossible to avoid the danger of an invasion. At this time, indeed, the fleet was in a very weak condition, but the valour and experience of the officers seemed in some measure to compensate that defect. The chief command was given to admiral Keppel, who had served with uncommon reputation during the last war. Admirals Sir Robert Harland and Sir Hugh Palliser served under him, both of them officers of undoubted courage and capacity. Arriving at Portsmouth towards the end of March 1778, admiral Keppel exerted himself with so much industry and diligence, that exclusive of those ships which it was found necessary to dispatch to the coast of North America under admiral Byron, a fleet of 20 sail of the line was got in complete readiness by the beginning of June, and ten more in a forward state of preparation.

At the head of this fleet admiral Keppel sailed from Portsmouth on the 13th of June, in order to protect the vast number of commercial shipping expected from all.

Britain.
619
General
state of the
success of
the Ameri-
can and
West Indian
war.

* See these
articles.

† See St
Lucia.

620
Bad condi-
tion of the
British navy
in Europe.

621
Operations
of Admiral
Keppel, and
his engage-
ment with
the French
fleet.

Britain. all parts of the world, and at the same time to watch the motion of the French fleet at Brest.

On the arrival of the British fleet off the coast of France, two French frigates approached it, in order to make their observations. These were the *Licorne* of 32 guns and the *Belle Poule* of 26. In consequence of a signal to give chase, the *Milford* frigate overtook the *Licorne* towards the close of the day, and requested the French captain to come under the British admiral's stern; upon his refusal, a ship of the line came up, and compelled him to come into the fleet. Next morning, the *Licorne* seeming by her motions to be altering her course, a shot was fired across her way as a signal for keeping it. Hereupon she discharged a broadside and a volley of small arms into the *America* of 64 guns that lay close to her, and immediately struck. The behaviour of the French captain was the more astonishing, as lord Longford, captain of the *America*, was at that instant engaged in conversation with him in terms of civility; but though such behaviour certainly merited severe chastisement, no hostile return was made.

The *Arethusa* of 26 guns, commanded by captain Marshal, with the *Alert* cutter, was mean while in pursuit of the *Belle Poule*, that was also accompanied by a schooner, and the chase was continued till they were both out of sight of the fleet. On his coming up, he informed the French captain of his orders to bring him to the admiral, and requested his compliance. This being refused, the *Arethusa* fired a shot across the *Belle Poule*, which she returned with a discharge of her broadside. The engagement thus begun, continued more than two hours with uncommon warmth and fury.

The *Belle Poule* was greatly superior not only in number, but in the weight of her metal: her guns were all 12 pounders; those of the *Arethusa* only six: Notwithstanding this inferiority, she maintained so desperate a fight, that the French frigate suffered a much greater loss of men than the British. The slain and wounded on board the former, amounted, by their own account, to near 100; on board the latter they were not half that proportion.

Captain Fairfax in the *Alert*, during the engagement between the two frigates, attacked the French schooner, which being of much the same force, the dispute continued two hours with great bravery on both sides, when she struck to the English cutter.

The *Arethusa* received so much damage, that she became almost unmanageable; the captain endeavoured to put her into such a position, as to continue the engagement; but was unable to do it. Being at the same time upon the enemy's coast, and close on the shore, the danger of grounding in such a situation obliged him to act with the more caution, as it was midnight. The *Belle Poule*, in the mean time, stood into a small bay surrounded with rocks, where she was protected from all attacks: she had suffered so much, that the captain, apprehending that she could not stand another engagement, had resolved, in case he found himself in danger of one, to run her aground; but her situation prevented any such attempt; and as soon as it was day-light, a number of boats came out from shore, and towed her into a place of safety. Notwithstanding the evident and great superiority on the side

Britain. of the French, this action was extolled by them as a proof of singular bravery, and the account of it received with as much triumph as if it had been a victory.

On the 18th of June, the day following the engagement with the *Belle Poule*, another frigate fell in with the British fleet; and was captured by the admiral's orders, on account of the behaviour of the *Licorne*.

The capture of these French frigates produced such intelligence to the admiral, as proved of the utmost importance, at the same time that it was highly alarming. He was informed that the fleet at Brest consisted of 32 ships of the line and 12 frigates. This was in every respect a most fortunate discovery, as he had no more with him than 20 ships of the line and three frigates. The superiority of the enemy being such as neither skill nor courage could oppose in his present circumstances; and as the consequences of a defeat must have been fatal to this country, he thought himself bound in prudence to return to Portsmouth for a reinforcement. Here he arrived on the 27th of June, and remained there till the ships from the Mediterranean, and the Spanish and Portuguese trade, and the summer fleet from the West Indies, coming home, brought him a supply of seamen, and enabled him to put to sea again, with an addition of ten ships of the line. But still there was a great deficiency of frigates, owing to the great numbers that were on the American station, and the necessity of manning the ships of the line preferably to all others.

In the mean time, the preparations at Brest being fully completed, the French fleet put to sea on the 8th of July. It consisted of 32 sail of the line, besides a large number of frigates. Count D'Orvilliers commanded in chief. The other principal officers in this fleet were counts Duchaffault, de Guichen, and de Grasse; monsieur de Rochechoart and monsieur de la Motte Piquet. A prince of the blood royal had also been sent to serve on board of this fleet; this was the duke of Chartres, son and heir to the duke of Orleans, first prince of the blood royal of France in the collateral line. He commanded one of the divisions in quality of admiral.

On the 9th day of July, the British fleet sailed out of Portsmouth in three divisions; the first commanded by Sir Robert Harland, the third by Sir Hugh Palliser, and the centre by Admiral Keppel, accompanied by Admiral Campbell, an officer of great courage and merit. The French had been informed that the British fleet was greatly inferior to their own; which was but too true at the time when they received this information. Being yet unapprised of the reinforcement it was returned with, the admiral sailed at first in quest of it, intending to attack it while in the weak condition it had been represented to him.

As the British admiral was equally intent on coming to action as soon as possible, they were not long before they met. On the 23d of July they came in sight. But the appearance of the British ships soon convinced the French admiral of his mistake, and he immediately determined to avoid an engagement no less cautiously than he had eagerly sought it before.

Herein he was favoured by the approach of night: All that could be done on the part of the British was to form the line of battle in expectation that the enemy would do the same. During the night the wind changed

Britain. so favourably for the French, as to give them the weather gage. This putting the choice of coming to action, or of declining it, entirely in their own power, deprived the British admiral of the opportunity of forcing them to engage as he had proposed.

During the space of four days, the French had the option of coming to action; but constantly exerted their utmost care and industry to avoid it. The British fleet continued the whole time beating up against the wind, evidently with a resolution to attack them. But notwithstanding the vigour and skill manifested in this pursuit, the British admiral had the mortification to see his endeavours continually eluded by the vigilance and precaution of the enemy not to lose the least advantage that wind and weather could afford.

The chase lasted till the 27th of July. Between ten and eleven in the morning, an alteration of wind and weather occasioned several motions in both fleets that brought them, unintentionally on the part of the French, and chiefly through the dexterous management of the British admiral, so near each other, that it was no longer in their power to decline an engagement. Both fleets were now on the same tack: had they so remained, the British fleet on coming up with the French would have had an opportunity of a fair engagement, ship to ship; which would hardly have failed of proving very decisive: but this was a manner of combatting quite contrary to the wishes of the French admiral. Instead of receiving the British fleet in this position, as soon as he found that an action must ensue, he put his ships on the contrary tack, that, sailing in opposite directions, they might only fire at each other as they passed by. By this means a close and sidelong action would be effectually evaded. As soon as the van of the British fleet, consisting of Sir Robert Harland's division, came up, they directed their fire upon it; but at too great a distance to make any impression: the fire was not returned by the British ships till they came close up to the enemy, and were sure of doing execution. In this manner they all passed close alongside each other in opposite directions, making a very heavy and destructive fire.

The centre division of the British line having passed the rearmost ships of the enemy, the first care of the admiral was to effect a renewal of the engagement, as soon as the ships of the different fleets, yet in action, had got clear of each other respectively. Sir Robert Harland, with some ships of his division, had already tacked, and stood towards the French; but the remaining part of the fleet had not yet tacked, and some were dropped to leeward, and repairing the damages they had received in the action. His own ship the *Victory* had suffered too much to tack about instantly; and had he done it, he would have thrown the ships astern of him into disorder. As soon as it was practicable, however, the *Victory* wore, and steered again upon the enemy before any other ship of the centre division; of which not above three or four were able to do the same. The other ships not having recovered their stations near enough to support each other on a renewal of action, in order to collect them more readily for that purpose, he made the signal for the line of battle ahead. It was now three in the afternoon; but the ships of the British fleet had not sufficiently regained their stations

to engage. The *Victory* lay nearest the enemy, with the four ships above mentioned, and seven more of Sir Robert Harland's division. These twelve were the only ships in any condition for immediate service; of the others belonging to the centre and to Sir Robert Harland's division, three were a great way astern, and five at a considerable distance to leeward, much disabled in their rigging.

Sir Hugh Palliser who commanded the rear division during the time of action, in which he behaved with signal bravery, came of course the last out of it; and in consequence of the admiral's signal for the line, was to have led the van on renewing the fight; but his division was upon a contrary tack, and was entirely out of the line. The French, on the other hand, expecting directly to be re-attacked, had closed together in tacking, and were now spreading themselves into a line of battle. On discovering the position of the British ships that were fallen to leeward, they immediately stood towards them, in order to cut them off. This obliged the admiral to wear and to steer athwart the enemy's foremost division, in order to secure them; directing, at the same time, Sir Robert Harland to form his division in a line astern, in order to face the enemy till Sir Hugh Palliser could come up, and enable him to act more effectually.

The admiral, in moving to the protection of the leeward ships, was now drawing near the enemy. As Sir Hugh Palliser still continued to windward, he made a signal for all the ships in that position to come into his wake: Sir Hugh Palliser repeated this signal; but it was unluckily mistaken by the ships of his division as an order to come into his own wake, which they did accordingly; and as he still remained in his position, they retained theirs of course.

Sir Robert Harland was now directed to take his station ahead, and the signal repeated for Sir Hugh Palliser's division to come into his wake; but this signal was not complied with, any more than a verbal message to that purpose, and other subsequent signals for that division's coming into its station in the line, before it was too late to recommence any operations against the enemy.

In the night, the French took the determination to put it wholly out of the power of the British fleet to attack them a second time. For this purpose, three of their swiftest sailing vessels were fixed in the stations occupied during the day by the three admiral ships of the respective divisions, with lights at the mast-heads, to deceive the British fleet into the belief that the French fleet kept its position with an intent to fight next morning. Protected by this stratagem, the remainder of the French fleet drew off unperceived and unsuspected during the night, and retired with all speed towards Brest: they continued this retreat the whole course of the following day, and entered that port in the evening. Their departure was not discovered till break of day; but it was too late to pursue them, as they were only discernible from the mast-heads of the largest ships in the British fleet. The three ships that had remained with the lights were pursued: but the vessels that chased them were so unable to overtake them from the damages they had received in the preceding day's engagement, that they were quickly re-

Britain.

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called; and the admiral made the best of his way to Plymouth, as being the nearest port, in order to put his fleet into a proper condition to return in quest of the enemy.

The killed and wounded on board the British fleet amounted to somewhat more than 500; but the French, it has been asserted on grounds of great credibility, lost 3000. This appears the less improbable, from the consideration that the French, in all their naval engagements, aim principally at the mast and rigging, and the British chiefly at the body of the ships.

622

Subsequent
dissensions,
and trial of
the admiral.

This action, whatever might have been the merit of the commanders, proved a source of the most fatal animosities. The bulk of the nation had so long been accustomed to hear of great and glorious victories at sea, that it was supposed a kind of impossibility for a French and British fleet to encounter without the total ruin of the former. The event of the last engagement, therefore, became an object of very severe criticism; and complaints were made, that, through the bad conduct of the blue division, an opportunity had been lost of gaining a complete victory over the French fleet. These complaints were quickly introduced into the public papers; and were carried on with a warmth and vehemence that set the whole nation into a ferment of the most violent and outrageous nature. The friends of Sir Hugh Palliser, the vice admiral of the blue, were no less violent in the defence of his conduct than his opponents were in its condemnation; while those who espoused the cause of the admiral manifested no less determination in accusing him of being the real cause of the escape of the French fleet, through his disobedience of the signals and orders of his commander, and by remaining at a distance with his division, instead of coming to the assistance of the rest of the fleet.

An accusation of so weighty a nature very much alarmed Sir Hugh Palliser. He therefore applied to admiral Keppel for a justification of his conduct; and required of him to sign and publish a paper relative to the engagement of the 27th of July; therein specifying as a fact, that he did not intend by his signals on the evening of that day to renew the battle then, but to be in readiness for it the next morning.

On the rejection of this demand, Sir Hugh Palliser published in one of the daily papers a variety of circumstances concerning that engagement; reflecting severely on the conduct of the admiral, and prefacing the whole by a letter signed with his name.

An attack so public, and so detrimental to his character, induced admiral Keppel to declare to the admiralty, that unless Sir Hugh Palliser should explain this matter to his satisfaction, he could not, consistently with his reputation, ever act conjointly with him.

This altercation happening before the meeting of parliament, was of course taken notice of when it met. In the house of peers an inquiry was demanded into the conduct of the commanders of the fleet on the 27th of July, on account of the declaration of admiral Keppel, that he would not resume the command until such an inquiry had taken place.

In the house of commons also it was urged, that as admiral Keppel had expressed a public refusal to serve in conjunction with Sir Hugh Palliser, the cause of such a declaration ought to be investigated. Admiral Keppel and Sir Hugh Palliser, who were both present

in the house on this occasion, spoke severally to the point in question in support of their respective conduct.

The issue of the contest between them was, that a motion was made for an address to the crown to bring Sir Hugh Palliser to a trial for his behaviour in the late engagement with the French fleet. In answer to this motion, Sir Hugh Palliser replied, in a speech of great warmth and vehemence, that he had already demanded and obtained a court-martial to sit on admiral Keppel, whom he charged with having through his misconduct caused the failure of success in that engagement.

This intelligence was received with great astonishment in the house. It had been, and still continued to be, the general desire of individuals of all parties, to heal this breach between the two officers at a time when the services of both were so much needed. It was therefore with universal concern the house was informed of the determination that had been taken to bring admiral Keppel to a trial. The admiral, however, conducted himself on this occasion with remarkable temper and coolness of expression. He acquiesced without reluctance in the orders that had been laid upon him to prepare for a trial of his conduct; which he hoped would not, upon inquiry, appear to have been dishonourable or injurious to his country, any more than disgraceful to himself.

The conduct of the board of admiralty in admitting the charges against admiral Keppel, and appointing a trial, was greatly condemned in the house. It was said to have been their duty to have laboured with the utmost earnestness, and exerted their whole official influence, to stifle this unhappy disagreement between two brave and valuable men; the consequences of which they well knew, and ought to have obviated, by interposing as reconciliators, instead of promoting the dispute, by consenting to bring it to a judicial and public hearing. On the other hand, it was answered, that they could not, consistently with the impartiality which they owed to every officer of the navy, refuse to receive all matters of complaint relating to subjects of their department. They had no right to decide on the merits of any case laid before them, but were bound to refer it to a court composed of naval officers, who were the only proper and competent judges of each others conduct in professional matters. In conformity with these principles, which were founded upon the clearest equity, they left the decision of the present altercation to the gentlemen of the navy; whose honour and integrity in all instances of this kind had never been called in question, and by whose verdict alone it was but just and reasonable that every officer in that line of service should wish to stand or fall.

The arguments upon this subject were urged with great heat and violence on both sides. They produced uncommon animosity and rancour, and gave rise to a spirit of contention that diffused itself through all classes of society. Such was the height of passion that prevailed every where, that the critical circumstances of the nation were wholly forgotten, and the attention of the public entirely absorbed in this fatal dispute. Individuals of all ranks and all professions engaged in it with as much zeal as if they had been personally concerned in the issue. The dissatisfaction that was excited upon this occasion among the upper classes in the navy, appeared in a memorial presented to the king

Britain.

by

Britain. by twelve of the oldest and most distinguished admirals, at the head of whom was the name of lord Hawke. The conduct of Sir Hugh Palliser was therein condemned without reserve: that of the admiralty itself was severely censured, as having established a precedent pregnant with the most ruinous consequences to the naval service of the kingdom. By the measure it had now adopted, that board had submitted to become the instrument of any individual who might be prompted by iniquitous motives to deprive the navy of its best and highest officers. It was a destructive violation, they said, of all order and discipline in the navy, to permit and countenance long concealed, and afterwards precipitately adopted charges, and recriminatory accusations of subordinate officers against their commanders in chief. It was no less improper and scandalous, to suffer men at once in high civil office, and in subordinate command, previous to their making such accusations, to attempt to corrupt the judgment of the public, by publishing libels on their officers in a common newspaper, which tended at once to excite dissensions in the navy, and to prejudice the minds of those who were to try the merits of the accusation against the superior officer.

It was remarkable in this memorial, that the majority of those who subscribed it were not only officers of the first rank and importance in the navy, but unconnected with the opposition, and attached by various motives to the court and ministry. This evinced their conduct in the present instance to have been uninfluenced by considerations of party.

No business of any consequence was agitated in either of the houses of parliament while the trial continued. It began upon the 7th of January 1779, and lasted more than a month, not ending till the 11th day of February ensuing. After a long and accurate investigation of every species of evidence that could be produced, the court-martial acquitted admiral Keppel of all the charges that had been brought against him in the most complete and honourable manner. He was declared to have acted the part of a judicious, brave, and experienced officer; and the accusation was condemned in the most severe manner.

Both houses of parliament voted him their thanks for the eminent services he had performed, and the whole nation resounded with his applause. The city of London bestowed every honour and mark of respect in its power upon admiral Keppel; while the resentment against his accuser was so strong, that it constrained him to retire wholly from public life, and to resign all his employments.

But notwithstanding the high degree of national favour and esteem in which admiral Keppel now stood, he thought it prudent to withdraw from a situation wherein he found himself not acceptable to those in power, by resigning his command.

623
Unsuccessful
attack
on the
board of
admiralty.

The conduct of those who presided at the admiralty board now became an object of severe censure; and a number of facts were cited to prove that its conduct for many years past had been highly reprehensible. The debates were uncommonly violent; and the resolution to condemn the conduct of the admiralty was lost only by a majority of 34. Administration, however, still kept their ground; for though a second attempt was made to show that the state of the navy was

inadequate to the vast sums bestowed upon it, the point was again lost by much the same majority. The argument used by the ministry in defence of their conduct in this case was, that the ships now constructed were of a much larger size, and consequently much more expensive than formerly. But however they might be victorious in argument, it is certain that the conduct of the admiralty was very far from giving general satisfaction at present. Not only admiral Keppel, but lord Howe, declared his resolution to relinquish the service while it continued under the direction of its managers at that time. Their resignation was followed by that of Sir Robert Harland, Sir John Lindsay, and several others; nay, so general was the dislike to the service now become, that no fewer than 20 captains of the first distinction had proposed to go in a body to resign their commissions at once; and were prevented from doing so only by the great occasion they saw there was at that time for their services.

624
Resignation of
admirals Keppel,
Howe,
and other
officers.

This extreme aversion to the service produced a direct attack upon lord Sandwich, at that time first lord of the admiralty. But though in this as well as other cases the ministry were still victorious, they could not prevent an inquiry into the cause of our want of success in the American war. This was insisted upon by lord and general Howe, whose conduct had been so much reflected upon, that a vindication was become absolutely necessary. The inquiry was indeed very disagreeable to administration, and therefore evaded as long as possible. From the evidence of lord Cornwallis and other officers of high rank, however, it appeared that the forces sent to America were not at any time sufficient to reduce it; that the Americans were almost universally unfriendly to the British cause; and that the nature of the country was such, that the conquest of it must be excessively difficult. It appeared also, that the camp of the Americans on Long Island was so strong, that it could not have been attacked with any probability of success, after their defeat in 1776, without artillery and other necessary preparations. In every instance, therefore, the general's conduct was shown to have been the most eligible and judicious possible. These facts, however, being directly opposite to what the ministry wished to appear, counter evidence was brought in, with a view to invalidate the testimony of the very respectable witnesses above mentioned. In this business only two were examined, viz. major-general Robertson, and Mr Joseph Galloway an American gentleman. From the evidence of Mr Galloway especially, it appeared that the conduct of general Howe had not been unexceptionable; that the greater part of Americans were friendly to the cause of Britain; that the country was not so full of obstructions as had been represented; woods and forests being no obstructions to the marching of armies in as many columns as they pleased; that soldiers might carry provisions for 19 days on their backs, &c.

625
Inquiry into
the conduct of the
American
war;

Though no stress could be laid upon such extravagant assertions, proceeding undoubtedly from ignorance, yet they fully answered the purpose of ministry at this time, viz. procrastination, and preventing the disagreeable truths abovementioned from striking the minds of the public too forcibly. The event of this inquiry, however, encouraged general Burgoyne to insist for an examination of his conduct; which indeed had been

626
Intro general
Burgoyne's
conduct,

Britain. so unmercifully censured, that even the ministers began to think he had suffered too much, and that he ought to be allowed to vindicate himself. He was accordingly permitted to bring witnesses in his own behalf; and from the most respectable evidence it appeared that he had acted the part, as occasion required, both of a general and soldier; that the attachment of his army to him was so great, that no dangers or difficulties could shake it; and that, even when all their patience and courage were found to be ineffectual, they were still ready to obey his commands, and die with arms in their hands. A great number of other particulars relating to his expedition were also cleared up entirely to the honour of the general, and several charges against him were totally refuted. It appeared, however, that the Americans, far from being the contemptible enemy they had been called, were intrepid and resolute. On the whole, it was remarked by a great number of the most judicious people in the nation, that the spirit of defamation, which for some time had been so prevalent, must at last produce the most fatal effects; by depriving the nation of its best officers, through the aversion that would be produced in them, both in the sea and land departments, to enter into a service where they were certain of being calumniated.

627
Accession
of Spain to
the confederacy
against Britain.

* See Spain.

628
Schemes for
the internal
defence of
the nation.

629
Vigorous
efforts of
the people
on this occasion.

630
British settlements
in Africa reduced.

After the resignation of admiral Keppel, the command of the Channel fleet was bestowed, though not without violent debates, on Sir Charles Hardy, a brave and experienced officer, but now advanced in years, and who had retired from the service with a design of never returning to it, being at that time governor of Greenwich hospital. The choice of an admiral to command this fleet was now of the greater importance on account of the accession of Spain to the general confederacy which took place this year *. The quarrel, like that with France, was formally intimated by the Spanish minister on the 17th of June 1779; and like that also was attended with new but ineffectual proposals of an accommodation with America, and removal of the ministry. The imminent danger, however, to which the nation was now exposed, required a vigorous exertion, and various projects for its internal defence were laid before the parliament. The principal of these were the raising of volunteer companies to be added to the regiments of militia belonging to the counties where they were raised, and the augmenting the number of militia. The latter was judged unadvisable, on account of the necessity there would be to send a great number of regular forces out of the kingdom, which would require new supplies of recruits; and the increase of the militia might prove detrimental to the recruiting service. The spirit and magnanimity displayed on this occasion, however, did the highest honour to the national character, and fully justified the opinion generally entertained of its opulence and valour. All parts of the kingdom seemed actuated by a laudable zeal to concur in every measure necessary for its defence; large sums were subscribed by people of rank and affluence; and companies were raised, and regiments formed, with such alacrity as quickly banished all apprehensions for the safety of the kingdom.

On the other hand, the French, now thinking themselves secure of victory by the accession of the whole strength of Spain to their cause, began to extend their plans of conquest. A squadron was fitted out under

the command of the marquis de Vaudreuil, destined to reinforce the fleet commanded by D'Estaing. But before its proceeding thither, an attack was made on the British settlements on the rivers Senegal and Gambia in Africa. These were easily conquered; and on this occasion the French quitted their own island of Goree, which was very soon after taken possession of by Sir Edward Hughes in his way to the East Indies. These unimportant and distant conquests, however, being insufficient to produce any great éclat, it was resolved to strike a blow nearer home, by the conquest of Jersey and Guernsey. An attempt was accordingly made; but with so little success, that not a single man could be disembarked on the island they intended to conquer. The enterprize, however, proved indirectly of great service to the cause of America. A fleet of 400 merchantmen and transports were at that time on the point of sailing for New York, under the conduct of admiral Arbuthnot; but that officer, being informed of the attack on Jersey, thought it his duty to come to the assistance of the island rather than proceed on his voyage. This delay was followed by another, occasioned by bad weather; so that the fleet, which was laden with warlike stores and necessaries, did not arrive till the end of August, and several important enterprizes projected by Sir Henry Clinton were of course laid aside.

The French, in the mean time, determined to make a second attempt on Jersey; but their squadron, being attacked by another under Sir James Wallace, was driven ashore in a small bay on the coast of Normandy, under cover of a battery. Thither they were pursued by the British commander, who silenced the battery, took a large frigate of 34 guns, with two rich prizes, and burned two other frigates and several other vessels.

Thus disappointed in their attempt on Jersey, a project was formed of invading Great Britain itself; and the preparations for it, whether serious or not, were so formidable, that they very justly excited a considerable alarm in this country. Not only were the best troops in the French service marched down to the coasts of the British channel, but transports were provided in great numbers, and many general officers promoted; the commanders also who were to have the charge of this important expedition were named by government. A junction was formed betwixt the French and Spanish fleets, in spite of the endeavours used on the part of the British to prevent it; and then the allies made their appearance in the British seas with upwards of 60 ships of the line, besides a vast number of frigates and other armed vessels.

All this formidable apparatus, however, ended in nothing more than the taking of a single ship, the Ardent, of 64 guns. They had passed the British fleet under Sir Charles Hardy in the mouth of the channel without observing him. Sailing then along the coast of England, they came in sight of Plymouth, where they took the Ardent, as has been already mentioned; after which they returned, without making the least attempt to land any where. The British admiral made good his entrance, without opposition, into the channel, on their quitting it, which a strong easterly wind obliged them to do. He endeavoured to entice them up the channel in pursuit of him; but the

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Unsuccessful attempt on Jersey.

632
French squadron of frigates destroyed by Sir James Wallace.

633
Invasion of Great Britain projected.

634
Formidable appearance of the combined fleets.

635
They take only a single ship.

Britain. the great sickness and mortality on board their ships, as they gave out, obliged them to retire, in order to repair their ships, and recruit the health of their people. Thus ended the first, and indeed the greatest exploit performed by the combined fleets in the British seas. An annual parade of a similar kind was afterwards kept up, which was as formally opposed on the part of the British; but not the least act of hostility was ever committed by either of the channel fleets against each other.

Though this ill success, or rather pusillanimity, manifest in the conduct of the combined fleets, was such that the French themselves were ashamed of it, the appearance of them in the channel furnished opposition with abundance of matter for declamation. All ranks of men, indeed, now began to be wearied of the American war; and even those who had formerly been the most sanguine in defence of coercive measures, now began to be convinced of their utility. The calamitous effects produced by the continuation of these measures, indeed, had by this time rendered the far greater part of the people exceedingly averse to them; and the almost universal wish was, that the oppressive burden of the American war should be cast off, and the whole national strength exerted against those whom, on account of our frequent contests with them, we had been accustomed to call our natural enemies. For this purpose the national spirit continued to be exerted with unabated vigour. Large sums were subscribed in the several counties, and employed in raising volunteers, and forming them into independent companies; associations were also formed in the towns, where the inhabitants bestowed a considerable portion of their time in training themselves to the use of arms. The East India company now forgot their quarrel with ministry, and not only presented government with a sum sufficient for levying 6000 seamen, but at its own cost added three 74 gun ships to the navy. Administration were not yet, however, weary of the plans they had laid down, and which they seemed inclined to prosecute, and indeed did prosecute, as long as the nation would support them. The virulence of opposition, therefore, still continued; and what was worse, every part of the kingdom seemed to imbibe their sentiments.

Among other charges now brought against them was that of misapplying the national force. An hundred thousand men were employed for the internal defence of the kingdom; which being much more than sufficient for the purpose, ought therefore to have been distributed into places where it might have acted to advantage. The army of Great Britain, it was said, now amounted to 300,000 men; the navy to 300 sail, including frigates and armed vessels; twenty millions had been expended on the service of the year 1779: and yet, with all this force and treasure, the utmost boast that ministers could make was, that the enemy had been hitherto kept at bay, and not allowed to invade Great Britain. Nor were the charges less heavy in other respects. Veteran officers had been passed by to make room for those of inferior merit. The discontented and miserable state of Ireland†, the losses of the West India islands, &c. were all put to the account of ministers; and it was said that the universal cry of the nation was for their dismissal. Their incapacity was now visible to every body; and it was a

matter of universal surprise how they durst retain their places in opposition to the general desire of the nation.

To all this ministry replied in a resolute and determined manner, denying or refuting every circumstance; and at last, after violent debates, gained their point of an address without any amendment proposing their removal, in the upper house by 82 to 41, and in the lower by 253 to 134. The enormous expences already incurred, however, and hereafter to be incurred, for the carrying on of the war, occasioned such a general alarm, that it was no longer possible to refuse compliance with some scheme of economy, or at least giving it a patient hearing. The duke of Richmond proposed that the crown should set the example, and moved for an address to this purpose; but the motion was lost by 77 to 36. The earl of Shelburne next undertook the discussion of the subject; and having, in a most elaborate speech, compared the expences of former times with the present, and shown the immense disparity, he proceeded to show the reasons. These were, that ministers formerly employed fewer persons, and obliged them to be content with smaller profits. One contractor supplied all the troops in America during the last war, and his agreement was to furnish a ration of provisions at sixpence; but so different was the management now, that the ration of provisions, instead of sixpence, cost two shillings. One person only had enjoyed contracts to the amount of 1,300,000l.; 3,700,000l. had passed through the hands of another contractor to be transmitted to America; but no voucher had been given for the expenditure of this immense sum; the accounts being contained in a few lines, accounting for 20,000l. in one line, 30,000l. in another, &c. Thus, he said, the ministry acquired a most unbounded and unconstitutional influence; and having the dangerous power of expending the national treasure without any check, corruption and venality every where abounded. He moved, therefore, that the expenditure of those vast sums annually sunk in extraordinary should be brought under some controul; and that to extend the public expences beyond the sums granted by parliament, was an invasion of its peculiar and exclusive rights.

Though this motion of the earl of Shelburne's, and some others of a similar tendency, were rejected on solid principles according to the ministry, the minds of the people were far from being conciliated to their views. Instead of this, the opinion began to be so general, that ministers exercised an unconstitutional influence over the representatives, and that such influence was very much augmented within these few years, it was now supposed by numbers of people, that nothing short of a change in the constitution of parliament could remedy the evil complained of. To this purpose a petition was framed in the city of York, on the 30th of December 1779, where a number of the most respectable people in the county had assembled; and delegated 61 gentlemen as a committee to manage the correspondence necessary for carrying on the design, and forming an association to support and promote it. In the present petition it was set forth, that, in consequence of the war in which the nation was involved, the public debt was greatly augmented, taxes increased, and trade and manufactures much af-

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Various
schemes of
economy
rejected.

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American
war gene-
rally disa-
greeable.

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Ministry
become ob-
noxious to
the people
at large.

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General o-
pinion of
unconsti-
tutional in-
fluence.

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Produces a
number of
petitions to
the house of
commons.

† See Ire-
land.

affected.

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fect. The profusion attending the war was complained of; and parliament was requested, previous to the raising of any new taxes, to inquire into, and correct the abuse of expenditure in the public money; to reduce exorbitant emoluments, abolish sinecure places and unmerited pensions, and apply the produce to the exigencies of the state. This petition was followed by others of a similar kind from 27 of the principal counties, and most of the large towns in England. The most severe and opprobrious language was used in the county-meetings with regard to the ministry and parliament. The latter were represented as void of all principle, ready to sacrifice both conscience and reputation to the will of those in power; and, in short, bound by no ties but those of the most sordid interest; ready on all occasions to enrich themselves by the spoils of their country; and persons to whom the honour or interest of the kingdom were matters of no consideration. The court, on the other hand, was looked upon as the receptacle of every one who harboured ill designs against the people of Britain, and where no body stood any chance of advancing himself but by adulation and extreme servility.

The emissaries of America and the other enemies of Great Britain are said to have been active in fomenting these discords, which at this period arose to an height unknown for a century past. The ministry, however, continued firm and undaunted. Previous to the taking any of the petitions into consideration, they insisted on going through the business of the supply, by determining the ways and means; nor did either the number of English petitions, or an additional one from the island of Jamaica setting forth the extreme danger that island was in, make them alter their resolution in the least.

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Mr Burke's
plan of par-
liamentary
independ-
ence and
economy.

At last, in the beginning of February 1780, a plan was brought forward by Mr Burke, for securing the independency of parliament, and introducing economy into the various departments of government. This plan, among other things, proposed the abolition of the offices of treasurer, comptroller, and cofferer of the household; treasurer of the chamber, master of the household, the board of green cloth, with several other places under the steward of the household; the great and removing wardrobe, the jewel office, the robes, board of works, and the civil branch of the board of ordnance. Other reformatations were also proposed; but though the temper of the times obliged the minister to admit the bills, and even to pretend an approbation of the plan, he meant nothing less than to admit it in its full extent, or indeed in any part, if it could possibly be prevented. When the plan, therefore, which he had approved in general, came to be particularly considered, he was found to be determined against every part of it. The general temper of the people, without doors, however, seemed now to have affected many of the members of parliament, and made them desert their old standard. An economical plan proposed in the house of lords by the earl of Shelburne was rejected only by a majority of 101 to 55. This was the strongest opposition that had appeared in that house for many years; but in the lower house matters still went worse. The first proposition in Mr Burke's plan was to abolish the office of secretary of state for the colonies; and the utmost efforts of administration

could preserve this office only by a majority of 208 to 201. The board of trade was abolished by 207 to 198: but this was the only defeat sustained by ministry at present; all the rest of the plan being rejected excepting only one clause, by which it was determined that the offices of lieutenant and ensign, &c. belonging to the yeomen of the guards, should not any longer be sold, but given to officers in the army and navy on half pay, and of 15 years standing in their respective lines of service.

This ill success was very mortifying to Mr Burke, who had expected to save more than a million annually to the nation. Administration, however, had still a greater defeat to meet with than what they had experienced in the abolition of the board of trade. The 6th of April was the day appointed for taking into consideration the numerous petitions, from half the kingdom of England, already mentioned. They were introduced by Mr Dunning; who, in a very elaborate speech, set forth the many attempts that had been made to introduce reformation and economy into the plans of government. These had been defeated by ministerial artifice, or overthrown by mere dint of numbers: he concluded therefore, and moved as a resolution of the house, That the influence of the crown had increased, was increasing, and ought to be diminished. This motion being carried after a long and violent debate, he next moved, that the house of commons was as competent to examine into and correct abuses in the expenditure of the civil list as in any other branch of the public revenue. To this another was added by Mr Thomas Pitt, that it was the duty of the house to provide an immediate and effectual redress of the abuses complained of in the petitions. The ministry now requested that nothing farther might be done that night: but such was the temper of the house, that both these motions were carried without a division; after which they were read a first and second time, and agreed to without a division.

Ministry had never received such a complete defeat, nor ever been treated with so much asperity of language. The news of the proceedings of this day were received by the people at large with as much joy as if the most complete victory over a foreign enemy had been announced. Opposition, however, though masters of the field at present, did not imagine they had obtained any permanent victory, and therefore resolved to make the most of the advantages they had gained. It was moved by Mr Dunning at the next meeting, that to ascertain the independence of parliament, and remove all suspicions of its being under undue influence, there should, every session, seven days after the meeting of parliament, be laid before that house an account of all the sums issued out of the civil list, or any other branch of the revenue, since the last recess, in favour of any of its members. This passed with little difficulty; but when he moved that the treasurers of the chamber and household, the cofferer, comptroller, and master of the household, with the clerks of the green cloth, and their deputies, should be excluded from having seats in the house, a warm debate ensued; and the motion was carried only by 215 against 213. This was the last triumph of the popular party; their next motion, for the exclusion of revenue officers, being thrown out by 224 against 195. A last effort was made by Mr Dunning's proposal of an ad-

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Remark-
able defeat
of the mini-
stry on the
6th of A-
pril 1780.

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They again
get a ma-
jority in
their fa-
vour.

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dress to the throne against proroguing or dissolving the parliament, until measures had been taken to prevent the improper influence complained of in the petitions. On this occasion the debates were long and violent; but the motion was lost by 254 against 203. Ministry would gladly have screened their friends from the vengeance of opposition; alleging the lateness of the hour, it being then past midnight. The speaker of the house, however, perceiving Mr Fox about to rise, insisted that the house should remain sitting; and thus the deserters from the popular party were condemned to hear their conduct set forth in such terms as perhaps were never applied on any other occasion to members of the British senate.

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Dreadful
disturbances
on account
of the po-
pish bill.

This last victory of administration confirmed the dissatisfaction and ill opinion which the people had conceived of the majority of their representatives. It was in the height of that ill temper which the conduct of parliament had created in the multitude, that those discontents broke out which were so near involving the kingdom in universal desolation. The hardships under which individuals professing the Roman Catholic persuasion had laboured for many years in England, had lately awakened the consideration of the liberal minded. The inutility and impropriety of persecuting people from whom no danger was apprehended, and who were not suspected of disaffection to the civil constitution of this country, induced several persons of rank and influence to undertake the procuring them relief.

The calamities of the times had afforded the English Roman Catholics a very proper occasion to manifest their attachment to government. They presented a most loyal and dutiful address to the king, containing the strongest assurances of affection and fidelity to his person and the civil government of this country.

"Our exclusion (said they) from many of the benefits of that constitution, has not diminished our reverence for it. We behold with satisfaction the felicity of our fellow-subjects; and we partake of the general prosperity which results from an institution so full of wisdom. We have patiently submitted to such restrictions and discouragements as the legislature thought expedient. We have thankfully received such relaxations of the rigour of the laws, as the mildness of an enlightened age, and the benignity of the British government, have gradually produced; and we submissively wait, without presuming to suggest either time or measure, for such other indulgence as those happy causes cannot fail in their own season to effect.

"We beg leave to assure your majesty, that our dissent from the legal establishment in matters of religion is purely conscientious; that we hold no opinions adverse to your majesty's government, or repugnant to the duties of good citizens; and we trust that this has been shown more decisively by our irreproachable conduct for many years past, under circumstances of public discountenance and displeasure, than it can be manifested by any declaration whatever.

"In a time of public danger, when your majesty's subjects can have but one interest, and ought to have but one wish and one sentiment, we think it our duty to assure your majesty of our unreserved affection to your government, of our unalterable attachment to the cause and welfare of this our common country, and our utter detestation of the designs and views of any foreign

power against the dignity of your crown, and the safety and tranquillity of your subjects.

"The delicacy of our situation is such, that we do not presume to point out the particular means by which we may be allowed to testify our zeal to your majesty, and our wishes to serve our country; but we entreat leave faithfully to assure your majesty, that we shall be perfectly ready, on every occasion, to give such proofs of our fidelity, and the purity of our intentions, as your majesty's wisdom and the sense of the nation shall at any time deem expedient."

This address was presented to the king on the first day of May 1778, and was signed by the duke of Norfolk, the earls of Surrey and Shrewsbury, the lords Stourton, Petre, Arundel, Dormer, Teynham, Clifford, and Linton; and by 163 commoners of rank and fortune.

The only obstacle that stood in the way of their wishes was, the difficulty of overcoming the prejudices of the lower classes, who would probably disapprove and condemn the indulgence shown to the people of a persuasion which they had been taught to look upon with horror and detestation. But notwithstanding the prepossessions of the vulgar, it was determined by several individuals of generous and liberal sentiments, to espouse their cause as far as it could be done consistently with the principles of the constitution and the general temper of the times. Their being patronised by some of the principal leaders in opposition, was a circumstance greatly in their favour; as it showed that those who professed to be the most strenuous friends to the freedom and constitution of this country, did not imagine they would be endangered by treating the Roman Catholics with more lenity than they had hitherto experienced.

About the middle of May, Sir George Saville made a motion for the repeal of some penalties enacted against them. He grounded his motion on the necessity of vindicating the honour and asserting the true principles of the Protestant religion, of which the peculiar merit was to admit of no persecution. It ill became the professors of such a religion to be guilty of that intolerance with which they approach others. The statutes he meant to repeal were such as gave occasion to deeds that debased and were a disgrace to human nature, by inciting relations to divest themselves of the feelings of humanity, and by encouraging the rapacity of informers.

He represented the address above quoted as a full proof of the loyal disposition of the Roman Catholics, and as an unfeigned testimony of the soundness of their political principles. In order, however, to silence the objections of those who might suspect them of duplicity, a test was proposed of so binding and solemn a nature, that no man could be supposed to imagine that any authority could annul its efficacy.

The pains and penalties of the statutes to be repealed were laid before the house by Mr Dunning. By these statutes it was made felony in a foreign clergyman of the Roman communion, and high treason in one that was a native of this kingdom, to teach the doctrines or perform divine service according to the rites of that church; the estates of persons educated abroad in that persuasion were forfeited to the next Protestant heir; a son or any other nearest relation, be-

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Britain. ing a Protestant, was empowered to take possession of his own father's, or nearest of kin's estate, during their lives; a Roman Catholic was disabled from acquiring any legal property by purchase.

The mildness of the British government did not indeed countenance the practice of the severities enacted by these statutes: but still the prospect of gain subjected every man of the Roman persuasion to the ill usage of informers; as on their evidence the magistrates were bound, however unwilling, to carry these cruel laws into execution.

In consequence of these representations, the motion made in favour of the Roman Catholics was received without one dissenting voice; and a bill in pursuance to its intent was brought in and passed both houses. The test or oath by which they were bound, was conceived in the strongest and most expressive terms. They were enjoined to swear allegiance to the king's person and family, and to abjure especially the pretensions to the crown assumed by the person called *Charles III.* They were to declare their disbelief and detestation of the following positions: That it is lawful to put individuals to death on pretence of their being heretics; that no faith is to be kept with heretics; that princes excommunicated by the pope and council, or by the see of Rome, or any other authority, may be deposed or murdered by their subjects or by any others; that the pope of Rome, or any other foreign prelate or sovereign, is intitled to any temporal or civil jurisdiction or pre-eminence, either directly or indirectly, in this kingdom. They were solemnly to profess, that they made the aforesaid declarations with the utmost sincerity, and in the strictest and plainest meaning of the words and language of the test, without harbouring any secret persuasion that any dispensation from Rome, or any other authority, could acquit or absolve them from the obligations contracted by this oath, or declare it null and void.

The indulgence shown to the Roman Catholics in England, encouraged those of the same persuasion in Scotland to hope for a similar relief. Several gentlemen of that nation of great rank and character, and who were members of parliament, expressed their warmest wishes that it should be extended to their country; and declared their intention to bring in a bill for that purpose the following session. The design was approved by the general assembly of the church of Scotland; who rejected, by a majority of no less than 100, a remonstrance that had been proposed against it. In consequence of these flattering appearances, a petition was prepared for parliament, on behalf of the Roman Catholics in Scotland. But these expectations were soon damped. A pamphlet was published against the doctrine and professors of the Popish religion, which represented them as the common foes to mankind and the disturbers of all states; and this being circulated among all classes, raised a number of enemies to the intended petition.

The opposition was at first chiefly conducted by some persons at Edinburgh, who assumed the title of Committee for the Protestant Interest; and under that denomination carried on a correspondence with all those who coincided with their opinions, and who formed a very large proportion of the common people in Scot-

land. As the committee at Edinburgh, from its residence in the capital of the kingdom, was deemed to consist of persons of the first importance, it directed in a manner the motions of all the others.

The persons who made up this committee, however, acted from no mean or mercenary views: they aimed only at the preservation of the Protestant religion, and the liberties of their country; both which they conceived were in danger, from the indulgence of government to individuals of the Roman Catholic persuasion.

Actuated by these ideas, they exerted themselves with so much activity, that the principal gentlemen of the Catholic persuasion thought it requisite for their safety to convey an intimation to the British ministry, that they were desirous to drop the application they had proposed to make for an indulgence similar to that which had been granted to their fellow-subjects in England of the same communion.

They published also in the newspapers the representation they had made to ministry; hoping thereby to convince the public, that they were sincerely desirous to remove any cause of dissatisfaction on their own account, and to submit to any inconveniency sooner than occasion disturbance. But matters were now gone too far to be conciliated by any means.

On the 2d day of February 1779, the populace met according to appointment, in order to carry into execution the various projects they had in contemplation. They began by an attack upon a house inhabited by a Roman Catholic bishop, with others of his persuasion, and which contained a place of worship. They committed it to the flames. They destroyed in the same manner another house that had also a chapel; after which they proceeded to vent their resentment on several individuals of that persuasion by burning their effects.

The next objects of their vengeance were those who had patronised the Roman Catholics. They beset the houses of Dr Robertson and Mr Crosby; but on hearing of the intentions of the rioters, the friends of both came to their assistance in such numbers, and so well prepared to repel the fury of the populace, that they did not dare to exercise the violence they had premeditated.

This disappointment, which was accompanied by further precautions against their malevolent designs, put an end to the attempts of the mob at Edinburgh. But the spirit of dissatisfaction at the indulgence intended to the Roman Catholics still remained in full force. Ministry was held out as harbouring a secret determination to undermine the Protestant religion, and to introduce popery; and loaded in consequence with the most outrageous invectives.

By degrees the same ungovernable spirit was communicated to part of the English nation. The cry against popery became daily more loud among the inferior classes; and that inveteracy which had subsided during so many years, began to revive in as powerful a degree, as if the nation were actually under the impending terrors of persecution. To this were added the secret fears of others; who still imagined it was not inconsistent with good policy to discourage a religion, from the professors of which so much danger had accrued to the constitution of this country in former times. These, tho' averse

Britain. averse to all acts of violence, thought it necessary to keep alive the antipathy to it, and by no means to show the least willingness to grant any further indulgence than it had hitherto experienced.

From this motive they were of opinion, that a suspension of the laws enacted against it, though tacit and unauthorised, was sufficient to remove all complaints of harshness and oppression on the part of the Roman Catholics; and they looked upon the penal statutes as a requisite bar to confine them within the bounds of submission, and fear of offending.

Thus a society was formed in London, which took the title of the Protestant Association, of which lord George Gordon, who had rendered himself conspicuous in Scotland by his opposition to the repeal, was elected president: and it now prepared to act in a decisive manner against the resolutions of the legislature.

On the 29th of May 1780, the associators held a meeting in order to settle in what manner they should present a petition to the house of commons against the repeal of the penal statutes. A long speech was made on this occasion by their president, who represented the Roman persuasion as gaining ground rapidly in this country; that the only method of stopping its progress, was to go up with a spirited remonstrance to their representatives, and to tell them in plain and resolute terms that they were determined to preserve their religious freedom with their lives, &c.

This harangue being received with the loudest applause, he moved, that the whole body of the association should meet on the 2d day of June in St George's Fields, at ten in the morning, to accompany him to the house of commons on the delivery of the petition. This being unanimously assented to, he informed them, that if he found himself attended by fewer than 20,000, he would not present the petition. He then directed they should form themselves into four divisions; the first, second, and third, to consist of those who belonged to the City, Westminster, and Southwark; the fourth of the Scotch residents in London. They were, by way of distinction, to wear blue cockades in their hats.

Three days previous to the presentation of the petition, he gave notice of it to the house, and acquainted it with the manner in which it was to be presented; but this was received with as much indifference and unconcern as all his former intimations.

On the 2d day of June, according to appointment, about 50 or 60,000 men assembled in St George's Fields. They drew up in four separate divisions, as had been agreed, and proceeded to the parliament house, with lord George Gordon at their head. An immense roll of parchment was carried before them, containing the names of those who had signed the petition.

On their way to the house, they behaved with great peaceableness and decency; but as soon as they were arrived, great disturbances took place. The rioters began by compelling all the members of both houses they met with, to put blue cockades in their hats, and call out, "No Popery." They forced some to take an oath that they would vote for the repeal of the popery act, as they styled it. They treated others with great indignity, posting themselves in all the avenues to both houses; the doors of which they twice endeavoured to break open.

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Britain. Their rage was chiefly directed against the members of the house of lords; several of whom narrowly escaped with their lives.

During these disturbances, lord George Gordon moved for leave to bring up the petition. This was readily granted; but when he proposed it should be taken into immediate consideration, it was strenuously opposed by almost the whole house. Enraged at this opposition, he came out several times to the people during the debates, acquainting them how averse the house appeared to grant their petition, and naming particularly those who had spoken against it.

Several members of the house expostulated with him in the warmest terms on the unjustifiableness of his conduct; and one of his relations, colonel Gordon, threatened to run him through the moment any of the rioters should force their entrance into the house. It was some hours before the house could carry on its deliberations with any regularity, which was not done till the members were relieved by the arrival of a party of the guards. Order being restored, the business of the petition was resumed; when lord George Gordon told them it had been signed by near 120,000 British Protestant subjects. He therefore insisted that the petition should be considered without delay. But notwithstanding the dangers with which they were menaced, and the proof which the mover of the petition had given that no means should be left unemployed to compel them to grant it, the commons continued immovable in their determination. Of 200 members, then present in the house, six only voted for it.

In the mean time, the mob had dispersed itself into various parts of the metropolis, where they demolished two Romish chapels belonging to foreign ministers; and openly vented the most terrible menaces against all people of that persuasion.

On the 4th of June they assembled in great numbers in the eastern parts of London; and attacked the chapels and houses of the Roman Catholics in that quarter, stripping them of their contents, which they threw into the street, and committed to the flames.

They renewed their outrages on the following day, destroying several Romish chapels, and demolishing the house of Sir George Saville in resentment of his having brought into parliament the bill in favour of the Roman Catholics.

Next day both houses met as usual; but finding that no business could be done, they adjourned to the 19th.

During this day and the following, which were the 6th and 7th of June, the rioters were absolute masters of the metropolis and its environs.

Some of those who had been concerned in the demolition of the chapels belonging to foreign ministers, having been seized and sent to Newgate, the mob collected before that prison, and demanded their immediate release. On being refused, they proceeded to throw firebrands and all manner of combustibles into the keeper's house; which unhappily communicated the fire to the whole building; so that this immense pile was soon in flames. In this scene of confusion the prisoners were all released. They amounted to about 300; among whom several were under sentence of death. They set fire, in the same manner, to the King's-bench and Fleet prisons, and to a number of houses belonging to Roman Catholics.

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tholics. The terror occasioned by these incendiaries was such, that most people hung out of their windows pieces of blue silk, which was the colour assumed by the rioters; and chalked on their doors and shutters the words, "No Popery," by way of signifying they were friendly to their cause.

The night of the 7th of June concluded these horrors. No less than 36 different conflagrations were counted at the same time. The bank had been threatened, and was twice assailed; but happily was too well guarded for their attempts. In the evening, large bodies of troops arrived from all parts, and came in time to put a stop to the progress of the rioters. They fell upon them every where, and multitudes were slain and wounded, besides the numbers that perished thro' intoxication. It was not until the afternoon of the 8th, that people began to recover from their consternation. During great part of the day, the disorders of the preceding night had created so terrible an alarm, that the shops were almost universally shut up over all London. The melancholy effects of misguided zeal were not, however, confined solely to London. The outrageous disposition of the populace was preparing to act the like horrid scenes in other parts of England. The mob rose in Hull, Bristol, and Bath; but through the timely interposition of the magistracy, these places were saved from their fury.

On the subsiding of this violent and unexpected commotion, it was thought proper to secure lord George Gordon. He was arrested, and committed close prisoner to the Tower, after having undergone a long examination before the principal lords of the council.

On the 19th of June, both houses met again according to adjournment. A speech was made on this occasion from the throne, acquainting them with the measures that had been taken in consequence of the disturbances, and assuring them of the utmost readiness to concur in whatever could contribute to the safety and maintenance of the laws and liberties of the people. The speech was highly approved; but the conduct of administration was severely censured, and charged with unpardonable neglect for not calling forth the civil power, and employing the military in due time to obviate the mischiefs that had been committed. Ministry excused itself, from the want of sufficient strength to answer all the demands of assistance that were made during the riots, and the absolute impossibility of suppressing them till the arrival of troops from the country. The various petitions were now taken into consideration that had been presented for the repeal of the act which had occasioned the riots; but the house continued in the same mind. Nevertheless it was thought proper to yield somewhat to the prejudices of the people, by passing a bill for preventing persons of the Popish persuasion from teaching or educating the children of Protestants; but this was afterwards thrown out by the lords.

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Ministerial
power confirmed by
the riots.

Nothing could have happened more opportunely for the present ministry than the riots just now related; for such were the alarm and terror occasioned by them, that the ardour which had appeared for promoting popular meetings and associations, and for opposing the measures of government, was in a great degree suppressed. The county meetings were represented as

having a tendency, like the Protestant association, to bring on insurrections and rebellions. Many began to consider all popular meetings as extremely dangerous; and among the commercial and monied people, there was not an inconsiderable number, who were so panic-struck by the late riots, that all attention to the principles of the constitution was over-ruled by their extreme anxiety about the preservation of their property. Had it not been for these events, though the minister was again at the head of a majority in parliament, it is probable that the spirit of opposition which prevailed in the different counties would have compelled administration to make some concessions to the people. But these transactions extremely strengthened the hands of administration, and rendered the exertions of the popular leaders less formidable. The popular party were also somewhat weakened, by the dissensions which took place among them in the county meetings, and assemblies of that kind, relative to annual parliaments and other political regulations which were proposed to be adopted.

In the suppression of these riots, however, the interference of the military without the command of the civil magistrate became a matter of suspicion to the people at large. In the house of lords the duke of Richmond expressed an expectation that some of his majesty's ministers would rise, and give their lordships assurances, that the measures taken in order to suppress the riots, which were defensible only upon the ground of necessity, would be so stated; and that what was illegally done, on the ground of necessity, would be cured by an act of indemnity.

Various other observations were thrown out relative to the king's prerogative and military law: upon which lord Mansfield observed, that neither the king's prerogative nor military law had any thing to do with the conduct of government in their endeavours to quell the late outrages. All men, of all ranks, descriptions, and denominations, were bound, by their oath of allegiance, to interpose for the prevention of acts of high treason, or felony, wherever any attempts to perpetrate such crimes were made in their presence; and were criminal, if they did not do it. In the whole of these proceedings, therefore, the military had not acted in their technical capacity as military, but had merely exercised their duty as civil men, which they, in common with other civil men, had both a right and an obligation to exercise. When a body of men were convened, without proceeding to the actual perpetration of treasonable or felonious acts, then, by a clause in the riot-act, the presence of the civil magistrate was necessary, before the military could interpose at all; and for this reason, that as no acts of felony were committed, they could have no plea in the civil character for meddling at all. But by the statute-law of the country, it became felonious in any combination of men to persevere in that combination, after the riot-act had been read by a justice of the peace; and this being done, then, and not till then, they had a constitutional reason for their interposition; namely, the privilege and duty of hindering the commission of felony, whenever they had it in their power. This being, therefore, the plain voice of the law, his lordship did not see how any prerogative of the king had been exercised, nor how military law had been established.

Britain. established. Nothing had been done out of the regular course of the law, and no power had been assumed by the soldiery which they did not possess as civil individuals, and not in their technical capacity as members of the military.

This doctrine was far from being agreeable to the nation in general, and was very freely censured both in newspapers and pamphlets. It was admitted, that if soldiers came accidentally, as individuals, to any place where felonies were committing, they might interfere as well as others of the king's subjects, in the prevention of them. But this was a different case from that of bodies of armed troops being sent under officers commissioned by the king, and with orders to act against riotous and disorderly persons without any authority from the civil magistrate. It was maintained, that the constitution of England knew no such character as a mercenary soldier, at the sole will of the executive power. Soldiers were held to their duty by laws which affected no other part of the community: and no soldier, as such, could be employed in the service of the constitution, without a particular act of parliament in his favour. The idea that a military man was convertible into a soldier or a citizen, as royalty might move its sceptre, was a novel idea, and only made for the present occasion. Mercenary armies were understood to consist of men, who had either detached themselves or been forced from civil societies. Laws were made on those suppositions, regarding their liberties and lives, such as no members of civil society could submit to. Soldiers were only tolerated by annual bills, and under repeated pretences; and the very idea of blending them with the common subjects of the state, and giving persons of their description a right of judging on its most important occurrences, would have filled our ancestors with horror. The laws tolerated an army for certain periods, and under certain restrictions; but there was no law which admitted the interference of the military in any of the operations of civil government.

It was acknowledged, that the late atrocious riots had rendered an extraordinary exertion of power absolutely necessary: but it was at the same time contended, that the interposition of the army in those outrages, without any authority from the civil magistrate, was an act of prerogative unconstitutional and illegal, though perfectly seasonable and beneficial. The public safety and benefit might sometimes excuse exertions of power, which would be injurious and tyrannical on ordinary occasions: but the utmost care should be taken, that such extraordinary exertions should not be established as precedents, which might operate very fatally to the constitution. An act of indemnity to the ministry, therefore, on account of the necessity of the case, should be immediately passed. But if a large standing army was kept up, and the king was understood to be invested with a power of ordering the troops to act discretionally, whenever he should judge proper, without any authority from the civil magistrate, the people could have no possible security for their liberties. In vain might be their appeals to the courts of justice: for the efficacy of appeals of that kind, in such cases, would depend on the pleasure of the prince.

Many were filled with similar apprehensions, and

Britain. alarmed at the dangerous precedent which the late exertions of the military afforded, however necessary they might be from the very singular circumstances of the case. Among others, Sir George Saville, in an address to his constituents some time afterwards, declared, that he considered them as "fully, effectually, and absolutely, under the discretion and power of a military force, which was to act without waiting for the authority of the civil magistrates."

A letter written by lord Amherst to lieutenant-colonel Twissleton, who commanded the troops employed in London for the suppression of the riots, and which was understood to be an order for disarming the citizens, was much canvassed in both houses of parliament. The letter, however, was denied to have such a meaning, and was said to be levelled only at disorderly persons who were found in arms. It excited, nevertheless, no inconsiderable alarm; and was an inducement, added to the consideration of the late riots, to lead a great number of citizens to provide themselves with arms, and to join in plans of military association, that they might be enabled to protect themselves and the city from violence and outrage, without any future interposition of the military.

We must now proceed to a detail of the operations ⁶⁴⁶ of the war, which, notwithstanding the powerful ^{Various engagements at sea, &c.} confederacy against Great Britain, seemed rather to be in her favour than otherwise. The Spaniards had begun their military operations by the siege of Gibraltar, but with very little success*; and the close of the year 1779 and beginning of 1780 were attended with some considerable naval advantages to Great Britain. On the 18th of December 1779, the fleet under the command of Sir Hyde Parker in the West Indies captured nine sail of French merchant ships, which, with several others, were under the convoy of some ships of war. Two days after he detached rear-admiral Rowley in pursuit of three large French ships, of which he had received intelligence, and which were supposed to be part of Mons. la Mothe Picquet's squadron returning from Grenada. His success there has been already mentioned; and about the same time several other vessels were taken by the same squadron commanded by Sir Hyde Parker.

On the 8th of January 1780, Sir George Brydges Rodney, who had been intrusted with the command of a fleet, one object of the destination of which was the relief of Gibraltar, fell in with 22 sail of Spanish ships, and in a few hours the whole fleet was taken.

In little more than a week after, the same fortunate admiral met with still more signal success. On the 16th of the month, he engaged, near Cape St Vincent, a Spanish fleet, consisting of 11 ships of the line and two frigates, under Don Juan de Langara. The Spaniards made a gallant defence; but four of their largest ships were taken, and carried into Gibraltar. These were, the Phoenix of 80 guns and 700 men, on board which was the admiral Don Juan de Langara; the Minorca, of 70 guns and 600 men, Don Antonio Oyarvide commander; the Princesa, of 70 guns and 600 men, Don Manuel de Leon commander; and the Diligente, of 70 guns and 600 men, Don Antonio Abornoz commander. Two other 70 gun ships were also taken; but one of them was driven on shore on the breakers and lost, and the

Britain. other was likewise driven on shore, but afterwards recovered. Four ships of the line escaped, and the two frigates: but two of the former were much damaged in the action; in the course of which one Spanish ship, the *St Domingo*, of 70 guns and 600 men, was blown up. The five men of war taken were remarkably fine ships; and were afterwards completely refitted, manned, and put into the English line of battle. The Spanish admiral and his officers applied to Sir George Rodney to obtain the liberty of returning to Spain upon their parole of honour: but this he declined for some time, because he was informed that a great number of British seamen were then prisoners in Spain, who ought to have been released. However, afterwards receiving assurances that those should be immediately set at liberty, he released the Spanish admiral and officers upon their parole; and the prisoners in general were treated with such generosity and humanity, as appeared to make a great impression upon the court of Madrid and the Spanish nation. When admiral Rodney had supplied the garrison of Gibraltar with provisions, ammunition, and money, he proceeded on his voyage to the West Indies; having sent home part of his fleet, with his Spanish prizes, under the command of rear admiral Digby; who took a French man of war on his return, the *Prothée*, of 64 guns and 700 men.

On the 20th of March there was an action in the West Indies between some French and English men of war, the former under the command of Mons. de la Mothe Picquet, and the latter, being part of Sir Peter Parker's squadron, under that of commodore Cornwallis. The engagement was maintained on both sides with great spirit; but the French at length gave up the contest, and made the best of their way for Cape François.

Admiral Rodney having arrived in the West Indies, and taken upon him the command of his majesty's ships at the Leeward islands, an action happened between him and the French fleet under the command of count de Guichen, on the 17th of April. The British squadron consisted of 20 ships of the line, besides frigates; and the French fleet of 23 ships of the line, and several frigates. The action began a little before one, and continued till about a quarter after four in the afternoon. Admiral Rodney was on board the *Sandwich*, a 90 gun ship, which beat three of the French ships out of their line of battle, and entirely broke it. But such was at length the crippled condition of the *Sandwich*, and of several other ships, that it was impossible to pursue the French that night without the greatest disadvantage. The victory was, indeed, claimed on both sides; but no ship was taken on either: and the French retired to Gaudaloupe. Admiral Rodney's ship, the *Sandwich*, had suffered so much, that for 24 hours she was with difficulty kept above water. Of the British there were killed in this engagement 120, and 353 were wounded.

On the 15th of May, another action happened between the same commanders. It did not commence till near seven in the evening, only a few ships having engaged, which were soon separated; and the whole ended in nothing decisive. Of the British 21 were killed and 100 wounded. The fleets met again on the 19th of the same month, when another action en-

sued; but this also terminated without any material advantage on either side. In the last engagement 47 of the British were killed and 193 wounded. According to the French accounts, the total of their loss in these three actions amounted to 158 killed and 820 wounded.

It was a very unfavourable circumstance for Great Britain, that the French should have so formidable a fleet in the West Indies: and this great force of the enemy was augmented in June, by being joined with a Spanish squadron near the island of Dominica. The French and Spanish fleets, when united, amounted to 36 sail of the line. They did not, however, attack any of the British islands, or even reconnoitre the fleet under the command of Sir George Brydges Rodney, which then lay at anchor in Gros Islet bay. Such, indeed, were the vigilance and good conduct of that admiral, and so sensible were the inhabitants of these islands of his services, that the houses of assembly of St Christopher's and Nevis presented addresses to him, testifying their gratitude for the security they enjoyed in consequence of his spirited and seasonable exertions.

In the month of June, admiral Geary, who commanded the grand fleet, took twelve valuable merchant ships bound from Port au Prince to Bourdeaux and other ports of France: But in the month of July a very important and unexpected capture was made by the Spaniards, which could not but excite much alarm in Great Britain. On the 8th of August, captain Moutray, who had under his command the *Ramilies* of 74 guns and two frigates, with the trade bound for the East and West Indies under convoy, had the misfortune to fall in with the combined fleets of France and Spain, which had sailed from Cadiz the preceding day. The *Ramilies* and the two frigates escaped: but the rest were so completely surrounded, that five East Indiamen were taken, and 50 merchant ships bound for the West Indies. Their cargoes were extremely valuable: it was one of the most complete naval captures ever made; and was a heavy stroke to the commerce of Great Britain. The Spaniards on this occasion behaved to their prisoners with great attention and humanity; and appeared disposed to make an adequate return for the generous treatment which their countrymen had experienced from admiral Rodney. This loss, however, great as it was, was scarce sufficient to compensate the capture of Fort Omoa from the Spaniards, where upwards of three millions of dollars were gained by the victors, and, among other valuable commodities, 25 quintals of quicksilver, without which the Spaniards could not extract the precious metals from their ores; the loss of which consequently rendered their mines useless.

But while the British were making the most vigorous efforts, and even in the main getting the better of the powers who opposed them fairly in the field, enemies were raised up throughout all Europe, who, by reason of their acting indirectly, could neither be opposed nor resisted. The power which most openly manifested its hostile intentions was Holland; but besides this, a most formidable confederacy, under the title of the *armed neutrality*, was formed, evidently with a design to crush the power of Great Britain. Of this confederacy the empress of Russia declared herself the head; and her plan was intimated on the

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26th of February 1780, in a declaration addressed to the courts of London, Versailles, and Madrid. In this piece it was observed, that though from the conduct of her imperial majesty it might have been hoped that her subjects would have been allowed peaceably to enjoy the fruits of their industry, and of the advantages belonging to all neutral nations, experience had proved the contrary: her imperial majesty's subjects had been often molested in their navigation, and retarded in their operations, by the ships and privateers of the belligerent powers. Her imperial majesty therefore declared, that she found herself under the necessity of removing those vexations which were offered to the commerce of Russia, as well as to the liberty of commerce in general, by all the means compatible with her dignity and the welfare of her subjects: but before she came to any serious measures, and in order to prevent all new misunderstandings, she thought it just and equitable to expose to the eyes of all Europe the principles which she had adopted for her conduct, and which were contained in the following propositions:

1. That neutral ships should enjoy a free navigation, even from port to port, and on the coasts of the belligerent powers.

2. That all effects belonging to the subjects of the belligerent powers should be looked upon as free on board such neutral ships, excepting only such goods as were stipulated contraband.

3. Her imperial majesty, for the proper understanding of this, refers to the articles 10. and 11. of her treaty of commerce with Great Britain, extending her obligations to all the other belligerent powers.

In the treaty made between Great Britain and Russia in 1734, it is said, "The subjects of either party may freely pass, repass, and trade in all countries which now are or hereafter shall be at enmity with the other of the said parties, places actually blocked up or besieged only excepted, provided they do not carry any warlike stores or ammunition to the enemy: as for all other effects, their ships, passengers, and goods, shall be free and unmolested. Cannons, mortars, or other warlike utensils, in any quantity beyond what may be necessary for the ship's provision, and may properly appertain to and be judged necessary for every man of the ship's crew, or for each passenger, shall be deemed ammunition of war; and if any such be found, they may seize and confiscate the same according to law: but neither the vessels, passengers, or the rest of the goods, shall be detained for that reason, or hindered from pursuing their voyage." The same enumeration of the goods, stipulated as contraband, was given in the treaty concluded between Great Britain and Russia in 1766.

4. That in order to determine what characterises a port blocked up, that denomination should not be granted but to such places before which there were actually a number of enemy's ships stationed near enough so as to make its entry dangerous.

5. That these principles should serve as rules in the judicial proceedings and sentences upon the legality of prizes.

Her imperial majesty declared, that she was firmly resolved to maintain these principles; and that, in order to protect the honour of her flag and the security of the commerce and navigation of her subjects, she

had given an order to fit out a considerable part of her naval forces. She added, that this measure would have no influence on the strict and rigorous neutrality which she was resolved to observe, so long as she should not be provoked and forced to depart from her principles of moderation and impartiality. It was only in that extremity that her fleet would be ordered to act wherever her honour, interest, and necessity should require. This declaration was also communicated to the States-general by prince Gallitzin, envoy extraordinary from the empress of Russia; and she invited them to make a common cause with her, so far as such an union might serve to protect commerce and navigation. Similar communications and invitations were also made to the courts of Copenhagen, of Stockholm, and of Lisbon, in order, it was said, that, by the united care of all the neutral maritime powers, the navigation of all the neutral trading nations might be established and legalized, and a system adopted founded upon justice, and which, by its real advantage, might serve as rules for future ages.

The memorial of the empress of Russia, though very unfavourable to the views of Great Britain, received a civil answer from that court: but by other powers it was received, as it might naturally be expected, with much more cordiality. In the answer of the king of France it was said, "what her imperial majesty claimed from the belligerent powers was nothing else than the rules prescribed to the French navy; the execution whereof was maintained with an exactness known and applauded by all Europe." He expressed his approbation of the principles and views of her imperial majesty; and declared, that from the measures she had now adopted, "solid advantages would undoubtedly result not only to her subjects but also to all nations." The kings of Sweden and Denmark also formally acceded to the armed neutrality proposed by the empress of Russia, and declared their perfect approbation of her sentiments. The States-general did the same: but on account of that slowness of deliberation which prevails in the councils of the republic, it was not till towards the close of the year that their concurrence was notified to the court of Russia. It was resolved by the powers engaged in this armed neutrality to make a common cause of it at sea against any of the belligerent powers who should violate, with respect to neutral nations, the principles which had been laid down in the memorial of the empress of Russia.

But though the British ministry could not openly engage in war with all the other powers of Europe, they determined to take severe vengeance on the Dutch, whose ingratitude and perfidy now became a general subject of speculation. It has already been observed, that, ever since the commencement of hostilities with the Americans, the Dutch had shown much partiality towards them. This continued to be the case, even beyond what the natural avidity of a mercantile people could be supposed to produce: Frequent memorials and remonstrances had of consequence passed between the two nations, and the breach gradually grew wider and wider, until at last matters came to an extremity, by a discovery that the town of Amsterdam was about to enter into a commercial treaty with America. This happened in the beginning of Sep-

tember

Britain.

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Origin of
the war
with the
Dutch.

Britain. September 1780, by the capture of Mr Laurens, lately president of the American congress, and who had been empowered by that body to conclude a treaty with Holland. Mr Laurens himself was instantly committed prisoner to the tower of London, and a spirited remonstrance was made to the states of Holland, requiring a formal disavowal of the transaction. To this, however, no other answer could be obtained, than that they would take the matter into consideration according to the forms and usages of the country; and that a reply would be given as soon as the nature of their government would admit.

Such an equivocal answer could not by any means be satisfactory; and therefore the most vigorous measures were resolved on. On the 25th of January 1781, it was announced to the house, that his majesty had been obliged to direct letters of marque and reprisal to be issued against the States-general and their subjects. For the causes and motives of his conduct in this respect, he referred to a public manifesto against that republic, which he had ordered to be laid before the house. The charges against the republic, however, were briefly summed up by lord North in his speech on the occasion. The states, he said, in open violation of treaties, had not only refused to give Great Britain that assistance which those treaties intitled her to claim when attacked by the house of Bourbon, but had also, in direct violation of the law of nations, contributed as far as they could to furnish France with warlike stores, and had also at length thought proper to countenance the magistracy of Amsterdam in the insult which they had offered to this country, by entering into a treaty with the rebellious colonies of Great Britain, as free and independent states. By the treaty of 1678, it was stipulated, that, in case Great Britain was attacked by the house of Bourbon, she had a right to take her choice of either calling upon the States-general to become parties in the war, and to attack the house of Bourbon within two months, or of requiring an aid of 6000 troops, and 20 ships of war, which the States were to furnish immediately after the claim was made. But though this country had always preserved her faith with Holland, yet that republic had refused to fulfil the terms of this treaty.

His lordship farther observed, that the States-general had suffered Paul Jones, a Scotchman, and a pirate, acting without legal authority from any acknowledged government, to bring British ships into their ports, and

to refit there (A). A rebel privateer had also been captured at the Dutch island of St Eustatius, after she had been suffered to capture two British ships within cannon-shot of their forts and castles. A memorial was presented at the Hague, in June 1779, on the breaking out of the war with Spain, to claim the aid we were intitled to require by the treaty of 1678; but of this not the least notice was taken on the part of the States. Two other notices had since been delivered, each of which met with the same reception. The British ministry had done all in their power to bring the States to a true sense of their interest; and when the necessity of the case compelled them to seize on Dutch ships carrying stores to France, they had paid the full value for the cargoes, and returned the ships; so that neither the private merchant, the private adventurer, nor the States, had suffered. France only had felt the inconvenience, by her being deprived of that assistance which she would have received from those cargoes.

With respect to an observation that had been made, that the treaty laid before the house, between the Dutch and the Americans, was nothing more than a contemplative project, his lordship remarked, that it was actually signed and sealed; the names of Van Berkel the pensionary of Amsterdam, and Monf. de Neuville, a merchant and burghers of that city, being subscribed to it on the part of the magistracy of Amsterdam, and the name of John Lee, as commissioner or agent for the congress of America. The States-general had also refused to pay the least attention to the requisition in his majesty's memorial, delivered by Sir Joseph Yorke, that proper notice should be taken of Van Berkel and his associates; as far as such a refusal could be implied by a contemptuous silence. As to the principal magistrates of Amsterdam, they were so far from disavowing the fact, or attempting to palliate it, that they gloried in the whole transaction; and expressly declared, even to the States-general, that what they had done was what their indispensable duty required.

His lordship added, that he lamented the necessity of a war with Holland; but it appeared to him to be an unavoidable measure. He confessed the situation of this country to be truly alarming; but when he considered the powerful stand that had already been made against the most alarming confederacy that had ever been formed against Great Britain, the little success that the enemies of this country had met with in all their

(A) This man, who had been formerly a servant in lord Selkirk's house, had landed in 1778 and plundered it of the plate, but without doing any farther mischief. The action, however, was very disagreeable to his own party; and at the desire of Dr Franklin, the plate was afterwards restored. After this exploit, he attempted to set fire to the town of Whitehaven, but without success. In 1779, he made a descent on the coast of Ireland, but without committing any act of hostility. His people indeed carried off some sheep and oxen, but their captain paid liberally for what they had taken. In the month of September 1779 he appeared in the Frith of Forth with several prizes. They advanced up the Frith above the island of Inchkeith, so as to be nearly opposite to Leith. His design was supposed to have been to burn the shipping there; but he was prevented from attempting this by a strong west wind; and such measures were also taken for the defence of the harbour, by erecting batteries and otherwise, that he would probably have miscarried had any attempt been made. On leaving the coast of Scotland he fell in with the Serapis and Scarborough, both of which he took after a most desperate engagement; by which all the vessels were reduced almost to wrecks. These were carried into a Dutch harbour; and it was this transaction to which lord North now alluded. He was called a pirate, on account of his not being at that time properly furnished with a commission either from France or America, though this was denied by the opposite party.

Britain. their various attempts against it, and the spirit and resources of the nation, the public prospects appeared to him much less gloomy than some gentlemen thought proper to represent them. Our difficulties were certainly great; but he trusted that they were by no means insuperable. He was neither desirous of concealing their magnitude, nor afraid to meet them, great as they must be acknowledged; because he was convinced, that when the force of this country was fully exerted, it was equal to the contest; and that the only means of obtaining an honourable and a just peace, was to show ourselves capable of carrying on the war with spirit and with vigour.

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Capture of
St Eusta-
tius.

Before this national resolution, however, could possibly have been communicated officially to the naval commanders in the West Indies, the Dutch were actually attacked. The defenceless island of St Eustatius was, on the 3d of February 1781, summoned by admiral Rodney and general Vaughan to surrender to the arms of Great Britain, and only one hour given to consider of it. The immense property on the island was confiscated, and a sale instituted, with such circumstances of apparent rapacity, as not only became the subject of a discussion in parliament, but drew upon this nation, whether justly or not we pretend not to determine, the ill will of all Europe*.

* See St
Eustatius.

The Dutch nation seem not in the present case to have behaved with any degree of prudence. Notwithstanding their provoking conduct towards Britain, they had made no preparations for war in case of being attacked. Notwithstanding this inactivity, however, it still appeared that they retained their ancient valour, and were in fact the most formidable naval enemies Britain had to contend with. By the month of August 1781 they had equipped a considerable squadron, the command of which was given to rear admiral Zoutman. On the 5th of that month, this squadron fell in with the British fleet commanded by admiral Hyde Parker. The force commanded by the Dutch admiral consisted, according to their own account, of one of 74, one of 68, one of 64, three of 54, and one of 44, besides frigates; but the English account represents the Dutch fleet as consisting of eight two-decked ships. No gun was fired on either side till they were within the distance of half musket-shot. The action began about eight in the morning, and continued with an unceasing fire for three hours and forty minutes. Both sides fought with equal ardour, and little advantage was gained on either. When the heat of the action was over, both squadrons lay to a considerable time near each other, when the Dutch ships of war with their convoy bore away for the Texel; and the English ships were all too much disabled to follow them. A Dutch 74 gun ship sunk soon after the action. On board the British fleet 104 were killed and 339 wounded; and the loss of the Dutch was probably greater. Admiral Zoutman, in the account of the engagement transmitted by him to the Stadtholder, said, that his men "fought like lions;" and it was said by the British admiral, in the account sent by him to the admiralty, that "his majesty's officers and men behaved with great bravery, nor did the enemy show less gallantry." The admiral of the Dutch fleet was promoted, honorary rewards were given to the principal officers, and two months pay to the men, for their be-

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Desperate
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ment with
admiral
Zoutman.

haviour in this action. When admiral Parker's fleet arrived at the Nore, his majesty, in order to testify his sense of his merit, went on board his ship, with the avowed design, as it is said, of conferring on him the honour of knighthood; but this the admiral thought proper to decline; and it was generally supposed, that this veteran officer was much disgusted that more ships had not been sent to him, for which he had applied, and which he conceived might have been spared, and whereby he might have been enabled to obtain a complete victory.

Thus the war was still carried on in various parts of the globe in such a manner as seemed to evince the impossibility of crushing the power of Great Britain by any force whatever. In Europe the utmost efforts of France and Spain were able to produce nothing more than the annual parade of a mighty fleet in the channel. This was answered by the appearance of a British fleet so formidable that the allies never durst attack them. The states of Holland had drawn out their force; and this too was opposed by one, which, if insufficient to conquer, was at least able to prevent their effecting any thing detrimental to our possessions. In the East Indies the united powers of the French and Indians had been conquered, and the Dutch settlements had suffered severely*. In the year 1781, however, the British naval power in the West Indies seemed to sink, and some events took place which threatened a total ruin of the empire in those parts. This was owing to the vast superiority of the combined fleets of France and Spain, by whom that of Britain was now so far outnumbered, that they could not achieve any thing of consequence. An ineffectual attempt on the island of St Vincents* was made by admiral Rodney; and an indecisive engagement took place, April 28th 1781, between admiral Hood and the count de Grasse; the event of which, however, if not advantageous, was certainly honourable to Britain, as the French had a superiority of six ships of the line. The damage done to the British ships having obliged them to retire to Barbadoes to refit, the French took that opportunity to make a descent on the island of Tobago†. The governor, Mr Ferguson, made a gallant resistance; but was at last obliged to surrender, as no prospect of succours appeared. On his return to England he complained loudly that the island had been unnecessarily lost. Admiral Rodney had sent rear-admiral Drake with six sail of the line, three frigates, and some troops, to the assistance of the island; but they were sent too late, and the island had capitulated before any relief was afforded it. In a letter of admiral Rodney, which was published in the gazette, some surprise was expressed, that the place had surrendered so soon: upon which governor Ferguson published an account of the siege, signed with his name, in all the London papers, in which he recriminated on the admiral. The governor's narrative was so perspicuous, so apparently satisfactory, and his charge against the admiral so strong, that it was thought incumbent on the latter to vindicate his conduct: but no answer to the governor's accusation ever appeared.

Besides the inconveniences which the British West India islands suffered in consequence of the war, it was also a misfortune to some of them that they were involved in domestic disputes, occasioned by their dissatisfaction.

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Vast efforts
of Britain.

* See Index.

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Disastrous
events of
the year
1781.

* See St
Vincents.

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Tobago
taken.
† See Tobago.

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Discontents
in the West
India
islands.

Britain. tion at the conduct of their governors. This was particularly the case with Jamaica and Barbadoes, in both which islands there were frequent contests about this time between the houses of assembly and the governors. But the remonstrances of the inhabitants on this subject did not meet with much attention from those who had it in their power to afford them relief: for it seemed, indeed, to be a kind of maxim with the British administration at this period, to pay little regard to any complaints from the subjects of the empire, respecting any abuse of authority, from whatever quarter they might come, Ireland only excepted; and, with respect to that kingdom, they were induced to relax a little from the high tone they were accustomed to assume, by the powerful and energetic arguments of the Irish volunteers. See IRELAND.

The great and decisive stroke, however, which happened this year, was the capture of lord Cornwallis with the division of the army under his command. Other events, indeed, were sufficiently mortifying. The province of West Florida had been reduced by the Spaniards; Minorca was besieged by them with an apparent impossibility of holding out; the island of St Eustatius was surprised by the French; and in short every circumstance seemed to proclaim the necessity of putting an end to a war so calamitous and destructive.

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Ministry
still persist
in their
military
schemes.

All the disasters that had yet happened, however, were not sufficient to induce the ministry to abandon their favourite scheme of war with the colonies. The parliament met on the 27th of November 1781. It has already been observed, that in the year 1780 the ministry had received such a signal defeat as seemed to prognosticate the ruin of their power. They had indeed afterwards acquired a majority, and the extreme terror produced by the riots had contributed not a little to the establishment of their authority. The remembrance of what had passed, however, most probably induced them to a dissolution of parliament; while the successes at Charlestown and other parts of America, once more gave them a decided majority in both houses. But the disasters of the year 1781 involved them in the utmost difficulty and distress. In the

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King's
Speech
Nov. 1781.

speech from the throne, his majesty observed, that the war was still unhappily prolonged by that restless ambition which first excited the enemies of his crown and people to commence it, and which still continued to disappoint his earnest desire and diligent exertions to restore the public tranquillity. But he should not answer the trust committed to the sovereign of a free people, nor make a suitable return to his subjects for their zealous and affectionate attachment to him, if he consented to sacrifice, either to his own desire of peace, or to their temporary ease and relief, those essential rights and permanent interests, upon the maintenance and preservation of which the future strength and security of Great Britain must depend. The events of war, he said, had been very unfortunate to his arms in Virginia, having ended in the loss of his forces in that province. No endeavours, he added, had been wanting on his part to extinguish that spirit of rebellion which his enemies had found means to foment and maintain in the colonies, and to restore to his deluded subjects in America that happy and prosperous condition which they had formerly derived from a due obedience to the laws; but the late misfortune in that quarter called

loudly for the firm concurrence and assistance of parliament, in order to frustrate the designs of their enemies, which were equally prejudicial to the real interests of America, and to those of Great Britain. At the close of the speech, his majesty observed, that among the many ill consequences which attended the continuation of the present war, he sincerely regretted the additional burdens which it must unavoidably bring upon his faithful subjects; but he still declared his perfect conviction of the justice of his cause; and that he had no doubt, but that, by the concurrence and support of his parliament, by the valour of his fleets and armies, and by a vigorous, animated, and united exertion of the faculties and resources of his people, he should be enabled to restore the blessing of a safe and honourable peace to all his dominions.

A motion for an address of thanks, couched in the usual style, was made in the house of commons. It was urged, that a durable and advantageous peace could result only from the firm, vigorous, and unremitting prosecution of the war. The present was not the time to relinquish hope, but to resolve upon exertion. By despair we should invite calamity to overwhelm us; and it would ill become a great and valiant people, whose resources were yet powerful and numerous, to submit where they should resist; to look with indifference upon their political importance; and to tarnish, by indolent pusillanimity, the national and dear-bought glories both of remote and recent æras, instead of opposing, with augmented force, a combination whose inveterate efforts to throw out of the scale of Europe the whole political existence of Great Britain, were strengthened by the late victory over lord Cornwallis in Virginia. But if a general spirit of unanimity, so requisite at one of the most alarming and important periods in the British annals, were to arise within the walls of parliament, and thence to diffuse itself throughout the body of the people, the gloom that hovered round us would rapidly disperse, and great successes would conduct the nation back to all its pristine splendor and felicity.

This was vehemently opposed by Mr Fox and Mr Burke. The latter remarked, that if there could be a greater misfortune than had already been undergone by this kingdom in the present disgraceful contest, it was hearing men rise up in the great assembly of the nation to vindicate such measures. If the ministry and the parliament were not to be taught by experience; if neither calamities could make them feel, nor the voice of God make them wise; what had this fallen and undone country to hope for? If any thing could tend to deject the people of England, to make them despair of their situation, and resign themselves to their fate, it must be to receive information that their ministers, after all that had been suffered, were yet determined to go on with the American war. A battle might be lost, an enterprise might miscarry, an island might be captured, an army might be lost in the best of causes, and even under a system of vigour and foresight; because the battle, after all the wisdom and bravery of man, was in the hands of heaven: and if either or all these calamities had happened in a good cause, and under the auspices of a vigilant administration, a brave people would not despair. But it was not so in the present case. Amidst all their sufferings and

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and their misfortunes, they saw nothing so distressing as the weakness or wickedness of their ministers. They seemed still determined to go on, without plan, and without foresight, in this war of calamities; for every thing that happened in it was a calamity. He considered them all alike, victories and defeats; towns taken, and towns evacuated; new generals appointed, and old generals recalled; they were all alike calamities in his eyes, for they all spurred us on to this fatal business. Victories gave us hopes, defeats made us desperate, and both instigated us to go on. They were, therefore, both calamities; and the king's speech was the greatest calamity of all; for the king's speech showed us the disposition of the ministers: and this disposition was not to retreat an inch; to go on, to plunge us deeper, to make our situation more disgraceful and more unhappy.

In the course of the debate, it was contended on the part of administration, and particularly by lord North, that by the address, as originally proposed, the house did not pledge themselves to any continuance of the American war: but this was strongly denied by the gentlemen in opposition. However, the point was at last decided in favour of ministry by a majority of 216 to 129; and the address was then carried as originally proposed.

In the house of peers, a motion for an address similar to that of the house of commons, was made by lord Southampton, and seconded by lord Walsingham. It was vigorously opposed by the earl of Shelburne; who observed, that seven years had now elapsed since blood was first drawn in America; and from that period to the present the affairs of Great Britain had been continually growing worse. A long progress in the war had left us in a situation in which there were no advantages to console; but dangers and calamities had arisen, which were unknown to us at the commencement of hostilities. Of nearly 87,000 men sent to America, how few had returned! What treasures had been in vain expended! What enormous debts accumulated! The most liberal national supplies had been followed by nothing but calamities; and the whole proceedings of the ministry manifested a want of system and of intelligence. Among other instances of mismanagement, his lordship remarked, that, instead of blocking up the French fleets within their own harbours, or immediately intercepting them on their putting out to sea, we had suffered them to sail far upon their expeditions to our distant settlements; and when they had acquired this great advantage, we slowly followed their powerful armaments with inconsiderable squadrons, and scarcely ever reached the place of destination till the enterprises of the enemy were totally accomplished. His lordship also declared it to be his opinion, that the capture of earl Cornwallis was owing to the preceding capture of St Eustatius. As to the farther prosecution of the war with the least prospect of success, it was totally impossible: the nation was too much exhausted both of men and money; recruits were not to be procured for the army; and as to our navy, if we had the best first lord of the admiralty, and the ablest board that ever sat, it was impossible to provide for all the distant services of so extensive a war. The reason was obvious. The fine navy that belonged to Great Britain at the

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conclusion of the last war had been suffered to rot and moulder away; while France and Spain had recruited and repaired their marine during the whole period of the peace.

Among other strictures on ministerial conduct, it was observed by the duke of Richmond, that at present scarcely a seventh part of the people were represented, while all the remainder had no concern whatever, either virtually or individually, in the management of their own affairs; which, their lordships well knew, the constitution of this country, as originally framed, gave them a right to have. He appealed to the house, whether many of their lordships did not name the members for several boroughs, and whether the representatives were not chosen only by the management of two or three burgesses. Were this point reformed, his grace declared, that he should still expect to see the country capable of regaining some portion of its former greatness. He also made some observations on the interior cabinet, which had, he said, been the ruin of this country. To prove its mischievous tendency, he instanced the declaration of the late earl of Chatham, who confessed to the house, that "he was duped and deceived, and that he had not been ten days in the cabinet before he felt the ground rotten under his feet." His grace likewise said, that though it was the middle of a war, he made no scruple to recommend it most strenuously to government, immediately to set about curtailing the numbers of the army, and that as much as possible. He recommended, that arms should be put into the hands of the people, for the purposes of domestic defence; and he did not doubt but that in this case, they would act with greater power and success, than even the most numerous military forces. He also advised withdrawing the troops from America, augmenting the navy as much as possible, and sending such succours to the West India islands as might enable them effectually to resist any attempts from the enemy.

Lord Stormont defended the address as originally proposed; and observed, that the language of the speech from the throne was proper to be held by any prince worthy of the crown, in a moment like the present; and the long established custom rendered such an address as had been moved the fit answer to it. The preservation of America, as a dependent part of the British empire, was too important to be relinquished; and the present crisis, so far from justifying despair, called for a redoubled ardour, and for immediate exertion.

The lord-chancellor said, that the present speech from the throne, like all others at the commencement of a session, was no more than a brief state of the nation, delivered in the ancient style of composition, and conformably to established usage, from almost the first existence of a parliament; and as to the address, its language not being specifically binding, their lordships might vote in favour of it, without pledging themselves to support any future ministerial measure whatever. The house at length divided, when lord Shelburne's amendment was rejected by a majority of 75 to 31. A short protest against the address was entered by the duke of Richmond, the marquis of Rockingham, and earl Fitzwilliam; in which they declared, that they dissented, "for reasons too often urged in vain for the last seven years against the ruinous prosecution

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Though ministers thus succeeded in carrying the addresses in the usual form, they did not meet with the like success in their main plan of carrying on the war. After the debate on the number of seamen, which was fixed at 100,000 for the ensuing year, Sir James Lowther moved as a resolution of the house, "That the war carried on with America had been ineffectual for the purposes for which it was undertaken; and that all farther attempts to reduce that continent by force of arms would be in vain, and must be injurious to this country by weakening her powers to resist her ancient and confederated enemies." This was supported by a number of arguments interlarded with the most severe reflections on ministerial conduct. In the course of this debate it was observed, and indeed with evident truth, that every state of consequence in Europe withheld its succours, and left us to contend alone against a multitude of enemies; so that we should search in vain for an ally from one corner of the universe to the other. As to the American war, in which the ministry so madly persisted, it was not like a war between two rival, or two neighbouring states, about a barrier or a boundary; a contest which, however it ended, could not detract much from the importance or weight of either. It was a war in which the conclusion of every campaign was against us; in which we weakened no enemy by our efforts; in which we had suffered every thing without gaining any thing. The American war had been a war of delusion from the beginning to the end. Every promise had been broken, every assertion had been falsified, every object had been completely given up. The ministry had said one thing one day; and the next day they had come down again, and with grave faces said what was directly contrary. But it was time to put an end to these delusions; not the least prospect of success in the war now remained; the period was therefore come, when it was indispensably necessary that the parliament should interfere, in order to avert that ruin with which this unhappy country was so immediately threatened.

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Different
plan of war
proposed
by Lord
North.

The motion was opposed by lord North; who said, that if it was agreed to by the house, it must put an end to the American war in every shape, and even cripple the hands of government in other respects. It would point out to the enemies of this country what were to be the mode and operations of the war; and thus inform the enemy in what manner they might best point their operations against this country during the next campaign. Great Britain must not retain any post in the colonies; for that would be considered as one mode of attempting to reduce the Americans to obedience by force. But was it not manifest, that there might be a necessity of retaining certain posts in America, for the convenience even of carrying on the war against France and Spain?

With respect to the American war in general, his lordship acknowledged, that it had been extremely unfortunate; but he affirmed, that the misfortunes and calamities which had attended it, though of a most serious and fatal nature, were matters rather to be de-

plored and lamented as the events of war, in themselves perpetually uncertain, than to be ascribed to any criminality in ministers. He had always considered the American war as a war of the most cruel necessity; but at the same time as a war commenced for the support of the just rights of the crown and of the parliament of Great Britain. He would also venture to declare, that as the war was unfortunate to all his fellow-subjects, so it was particularly distressing to himself. He had always considered it as the heaviest calamity of his life; and if, at any time, a sacrifice, not only of the emoluments of his situation, but even of the whole of his private fortune, could have purchased for his country a safe and honourable peace, he would have made that sacrifice with the utmost cheerfulness, and thought the opportunity of offering it the greatest blessing which could possibly have befallen him. His lordship added, that though he totally disapproved of the motion, yet he was willing to declare it to be his opinion, that it would not be wise nor right to go on with the American war as we had hitherto done; that is, to send armies to traverse from the south to the north of the provinces in their interior parts, as had been done in a late case, and which had failed of producing the intended and the desired effect.

This new method of carrying on the war was as much disapproved of as the other; nor indeed did it seem to be generally believed that any material alteration was to take place in the ministerial system. General Burgoyne observed, that declaring a design of maintaining posts in America, of the nature of New York, was declaring a design of offensive war; and that such a maintenance of posts would prove an improvident and a preposterous war. The great if not the only purpose of keeping places of arms upon an enemy's coast, and especially upon a continent, must be for offensive war. During the glorious administration of the earl of Chatham, a place of arms was intended to be established at St Malo's; and it was afterwards established at Belleisle upon a more extensive view than that of a mere inlet into the country. It made a powerful diversion, and drew a great military force from Germany, to protect the whole range of coast from Bayonne to Dunkirk, which was threatened by an embarkation from that place of arms. But the circumstance which rendered that menace against the French coast either practicable or formidable was, our dominion of the sea. At that resplendant era, our naval flag rode in the very bays of France as securely as if anchored at Spithead; and a few frigates would have convoyed an army of 20,000 men to any one point of the French or Spanish coast. This then could be produced as a just precedent for a place of arms. But what other precedents existed? The command of a strait, by which it was possible either to give an inlet for commerce, or to divide the ports of an enemy. Of such a nature was Calais, which, together with Dover, kept separate as often as we thought proper the great ocean and the German sea. Such also was Gibraltar; a place of arms that gave a virtual superiority to the navy of England, though with an inferior number of ships, as separating the ports of the house of Bourbon in the ocean from their ports in the Mediterranean, and preventing the junction of their fleets. But New York, as a place of arms, could answer

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Opposed by
general
Burgoyne.

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swer no possible purpose but to feed an impracticable war, and to multiply that system of contracts, loans, and influence, which, after having operated to the loss of every dependence of the country, was ready to give the final blow to the last remains of property and liberty in the country itself.

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He recants
his original
principles
concerning
America.

The general added, that he had not hitherto touched upon the principle of the American war. The impracticability of it was a sufficient justification for supporting the present motion. But he was now convinced that the principle of the American war was wrong, though he had not been of that opinion when he formerly engaged in the service in America. He had been brought to this conviction by observing the uniform conduct and behaviour of the people of America. Passion, prejudice, and interest, might operate suddenly and partially; but when we saw one principle pervading the whole continent, the Americans resolutely encountering difficulty and death for a course of years, it must be a strong vanity and presumption in our own minds, which could only lead us to imagine that they were not in the right. It was reason, and the finger of God alone, that implanted the same sentiment in three millions of people. He would assert the truth of the fact against all which either art or contrivance could produce to the contrary. He was likewise now convinced, upon comparing the conduct of the ministry, as time had developed their system, that the American war formed only a part of a general design levelled against the constitution of this country and the general rights of mankind.

After some farther debate, Sir James Lowther's motion was rejected by a majority of 220 to 179. This, however, was a majority in which the ministry had little reason to exult; as it was sufficiently apparent, from the numbers who voted against administration, that the uninfluenced sense of that house was clearly and decisively against any farther prosecution of the American war.

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Debate on
the army
estimate.

Other arguments to the same purpose with those of general Burgoyne, just mentioned, were used in the debate on the army estimates. On the 14th of December, the secretary at war informed the house, that the whole force of the army, including the militia of this kingdom, required for the service of the year 1782, would amount to 186,220 men, and for this force the parliament had to provide. The sum required for these troops for pay, clothing, and other articles, amounted to four millions two hundred and twenty thousand pounds. This military force exceeded that of the last year by 4074 men; and the expence was consequently greater by 29,067 l. 15 s. The increase was occasioned by the greater number of troops already sent, or then going, to the East Indies. But the expence of those troops was to be reimbursed by the East India company.

After some farther statements relative to the military force of the kingdom, and its expence had been made by the secretary at war, colonel Barré rose, and with great vehemence declared, that the estimates of the army which were laid before that house were scandalous and evasive. There was a much greater number of non-effective men than were stated in the estimates. In fact, they amounted to a fifth part of the army. The house should also recollect, that the estimates lying on

the table did not compose the whole of the expences of the army; for extraordinaries of several millions were yet to come. Neither were the men under the several descriptions given by the secretary at war the whole number of military force employed. Other troops were employed solely at the discretion of the minister, and paid irregularly and unconstitutionally, without the assent or knowledge of the legislature; particularly the provincial corps in America, amounting to nine thousand men in actual service, the statement of which force, though it had been called for from year to year, was never brought into the estimates.

With respect to the army estimates, the colonel proceeded to observe, that in many instances they were filled with such abandoned impositions, that there appeared an actual design to treat inquiries from the parliament with sovereign contempt. Several regiments, of which the number of men did not amount to one hundred, were set down at eight hundred; and others not having more than fifty were mentioned in the estimates as consisting of five, six, or seven hundred men. Indeed, too large a part of the armies, for which that house had been persuaded to give their votes, existed only upon paper. Amongst other regiments, the royal English fusileers had not even a fourth of their complement. The royal Scotch fusileers were in a worse predicament. Their number fell short of even one hundred men. The 60th regiment was stated as amounting to 3500 men, when the fact was, that it did not consist of 1500; and many others might be enumerated in the same situation. The statement of the estimates relative to garrisons, particularly those of Gibraltar and Minorca, were equally delusive and overcharged.

Lord George Germaine said, that the reason why the provincial corps had not been included in the estimates was, that some share of the public money might be spared, by avoiding to vote an establishment for these troops. They were raised and paid in a manner by much the most economical for the nation. They were solely under the management of the commander in chief; and an officer, called the *inspector-general of the provincial corps*, regularly took care to muster them from time to time; nor was a single man paid for if not in actual employ. His lordship also informed the house, that the ministry were unanimously of opinion, that, considering the present situation of affairs, and the misfortunes of the war, it would not be right to continue any longer the plan on which it had hitherto been conducted; and therefore that a fresh army would not be sent to supply the place of that captured at York-town under earl Cornwallis.

Sir George Savile expressed the strongest disapprobation of any farther prosecution of the American war, or of raising any more troops for that purpose. He adverted to the intimation which had been given by the ministry, that a change was to be made in the mode of conducting the American war. This, he said, was in fact telling the house, that they were determined to prosecute the war with all the feeble efforts of which they were yet capable. Every unprejudiced and sensible observer must perceive, that so extraordinary a conduct resembled, if it did not indicate, the violence of insanity. General Conway declared, that he entirely disapproved of a continuance of the American

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rican war in any form, as he wished that it might totally cease. He eagerly desired the recal of our fleets and armies, and was anxious for an entire and immediate prevention of those calamities which had almost completed the destruction of the empire. He considered an avowal of the independence of America as a severe misfortune, and a debasing stroke against Great Britain; but of the two evils he would choose the least, and he would submit to the independence of America. In short, he would almost yield to any circumstance whatsoever, rather than persist a day longer in the prosecution of so pernicious a war. Ideas had been started relative to a war of posts, among which New York had been particularly mentioned. But on what military authority did the ministry presume to think that New York was tenible? What garrison would be able to maintain it? The diversity of military opinions given on this subject served rather to alarm than to convince. To secure New York, the possession of Long Island, which is a hundred miles in length, is absolutely necessary; and it was well known that Sir Henry Clinton, with all his troops, did not consider himself as secure. Notwithstanding these and other arguments, however, the question was carried in favour of ministry by a considerable majority, and the supplies were voted accordingly.

† See *Eu-
statius.*

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Debates on
admitting
Lord
George
Germaine
to sit in the
house of
peers.

Besides the grand question for and against the continuance of the American war, several other matters of smaller moment were agitated this session; particularly the affair of St Eustatius † as already mentioned, an inquiry into the state of the navy, and into the causes of our bad success in the American war. All these questions were carried in favour of ministry, though not without a strength of opposition they had never experienced before. A motion for censuring lord Sandwich was lost only by 236 to 217; and so general did the desire of a change of administration now appear, that it excited no small degree of surprise that the present ministers should still retain their places. Nothing could set in a more striking point of view the detestation in which they were held, than the extreme aversion shown at admitting lord George Germaine to the dignity of peerage. On this occasion, the Minden business was not only ripped up, but after his actual investiture, and when he had taken his seat in the house, under the title of lord viscount Sackville, a second debate ensued relative to the dishonour the peers had sustained by his admission into their house. It was moved by the marquis of Caermarthen, that "it was reprehensible in any minister, and highly derogatory to the honour of that house, to advise the crown to exercise its indisputable right of creating a peer, in favour of a person labouring under the heavy censure of a court martial," which was particularly stated in the motion, and also the public orders given out on the occasion by the late king. The marquis urged, that the house of peers being a court of honour, it behoved them most carefully to preserve that honour uncontaminated, and to endeavour to mark out, as forcibly as possible, the disapprobation which they felt at receiving into their assembly, as a brother peer, a person stigmatized in the orderly books of every regiment in the service. The earl of Abingdon observed, that he could not help conceiving, that although there was not a right of election, there was

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and must be a right of exclusion vested in that house, when the admission of any peer happened to be against the sense of their lordships. His judgment of this arose not only from the idea, that that house was possessed of original rights, as independent of the crown as of the people; but from the circumstance of their being the hereditary counsellors of the crown, against the sense of whom, he held, the crown could not of right exert itself. His lordship declared, that he considered the admission of lord George Germaine to a peerage, to be no less an insufferable indignity to that house, than an outrageous insult to the people at large. It was an indignity to that house, because it was connecting them with one whom every soldier was forbidden to associate with. It was an insult to the people; for what had the person raised to the peerage done to merit honours superior to his fellow-citizens? He had only one claim to any kind of promotion; and that was, that he had undone his country, by executing the plan of that accursed, invincible, though efficient cabinet, from whom, as he had received his orders, so he had obtained his reward.

Lord Sackville declared, that he neither knew by whose advice he had been raised to this dignity, nor thought, that, in a point of this nature, the recommendation of any minister was in the least needful. To bestow honours was the peculiar and universally admitted prerogative of the crown, provided that the parties advanced to them were competent to receive them. This he insisted was the case at present. The sentence of the court-martial was stated as the ground of the objection against his elevation to the peerage; but even such a sentence did not amount to any legal disability whatsoever. Twenty-three years had elapsed since the court-martial which sat upon him had pronounced that sentence; and he should naturally suppose, that such of their lordships, and of the public in general, as were at all acquainted with the peculiarly hard and unfair circumstances which accompanied his trial, had been long accustomed to behold this business in its proper point of view. Affailed by an excess of acrimony, at least equal to any that a British officer could have experienced from enemies at once implacable and unjust, he was condemned unheard, and punished previously to his trial. In these circumstances, it was well known, that he had challenged his accusers to come forward; that he provoked inquiry; and that he insisted upon a trial. He was assured at the time, that if the determination of the court-martial should even prove capital, it would be carried into execution: but no intimations of this kind could dissuade him from insisting that a trial should take place; and he flattered himself, that the candour and equity of their lordships would lead them to conclude, that such behaviour, under such circumstances, could only result from a consciousness of innocence. To the sentence of it he had submitted; and, as the result of such submission, he thought that he had then acquitted himself to his country and to the public. At the present moment, it was extremely singular, that although neither the charge, nor the defence, nor the evidence, nor in short any one part of the proceedings on the trial, was before their lordships, they were called upon to put the sentence a second time in force against him. He trusted, however, that their lordships would.

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would call to mind the occurrences which had taken place, with respect to himself, subsequent to that period. In 1765, not more than four years after the trial, he was appointed to an office in administration. Previously to his acceptance of the propositions then made to him that he should bear a part in administration, it was agreed for him to become a member of the council-board. There he accordingly took his seat; and thenceforward considered such a circumstance as virtually a repeal of the sentence of the court-martial. A revision of the proceedings of the court-martial was now unattainable; for during the space of 23 years, the period of time which had elapsed since the trial, every member who had sat upon it except one had been dead and buried. An attempt to investigate the motives which actuated the several members of the court was equally impracticable. He hoped, therefore, their lordships would be of opinion, that he was fully competent to receive the title which his sovereign had been graciously pleased to bestow upon him; and that it was neither expedient, necessary, nor becoming, for that house, to fly in the face of the crown, or to oppose its indisputable prerogative, because it had advanced an old and faithful servant to the dignity of a seat among their lordships.

The duke of Richmond observed, that from the reign of Edward III. to the time of Henry VII. it was expressly stated, in every new patent of the creation of a peer, that such creation was made *with the consent of parliament*; nor did a single instance occur, during the whole of this period, of any title being granted without the particular acquiescence of the house of lords. After the reign of Henry VII. the crown carried with a considerably less restraining hand this exercise of the prerogative; and during the latter æras, it had been generally regarded as an incontestable and established right. It appeared, however, that the ancient principles of the British constitution had set boundaries to restrain this exercise of the prerogative; and that formerly a legal disability was not the only circumstance which might amount to a disqualification for the peerage. Some insinuations had been thrown out respecting the decision of the court-martial, which were far from being well grounded. When the court-martial took place, for the purpose of determining the criminality or the innocence of the noble viscount, the times were not, as had been represented, remarkable for the predominance of clamour or of faction. He observed, that their lordships were not ignorant, that the noble viscount rested a considerable part of the vindication of his behaviour at the battle of Minden, upon the supposed existence of a striking variation in the orders delivered from prince Ferdinand to the commander of the cavalry. It was understood that the first order was, that *the cavalry* should advance; and the second, that the *British cavalry* should advance. Yet even under these supposed contradictory orders, it was evident that the noble lord should advance; and, certainly, the distance being short, he enjoyed a sufficient space of time for obedience to his instructions. Lord Southampton, who delivered one of the messages, was now present in the house; and it should seem, that he had no choice, on this occasion, but to acknowledge, either that he did not properly deliver such orders to the noble viscount, or that the latter, having properly received

them, neglected to obey them. But whatever difficulties might have arisen, during the endeavours to determine exactly how much time had actually been lost, in consequence of the noncompliance of the noble viscount with the orders which he received, his grace said, that he could with much facility have solved what all the witnesses examined as to this point were not able positively to determine. If, as he was summoned to appear upon the trial, his deposition had been called for, he could have proved, because he held all the while his watch within his hand, and seldom ceased to look at it, that the time lost when the noble viscount delayed to advance, under pretence, that, receiving such contradictory orders, it was impossible for him to discover whether he ought to advance with the *whole* cavalry, or only with the British cavalry, was *one hour and a half*. It was, therefore, extremely evident, that the noble lord had it in his power to have brought up the cavalry from the distance of a mile and a quarter; in consequence of which, by joining in the battle, they might have rendered the victory more brilliant and decisive. But, before the arrival of this cavalry, the engagement was concluded. Such was the testimony, his grace said, which, having had the honour to serve, at the battle of Minden, under prince Ferdinand of Brunswick, he must have borne, if, being summoned, the members of the court-martial had thought proper to have examined him on the trial. Under such circumstances, the noble viscount could have little reason to complain of the sentence of the court-martial, of the orders which followed, or of the loss of his commission.

The motion was powerfully supported by other arguments, both by the duke of Richmond himself and other peers; but, however, was rejected by a majority of 93 against 28. A protest was entered, signed by nine peers, in which the sentence and the public orders were particularly stated; and in which they declared, that they "could not look upon the raising to the peerage a person so circumstanced, in any other light than as a measure fatal to the interests as well as to the glory of the crown, and to the dignity of that house; insulting to the memory of the late sovereign, and likewise to every surviving branch of the illustrious house of Brunswick; repugnant to every principle of military discipline, and directly contrary to the maintenance of the honour of that house, and to that honour which has for ages been the glorious characteristic of the British nation, and which, as far as could depend on them, they found themselves called upon, not more by duty than inclination, to transmit pure and un sullied to posterity."

The ruinous tendency of the American war was now so strikingly apparent, that it became necessary for those who had a just sense of the dangerous situation of their country, who wished well to its interests or even to prevent its destruction, to exert their most vigorous efforts to put an end to so fatal a contest. Accordingly, on the 22d of February, a motion was made by general Conway, "That an humble address should be presented, earnestly imploring his majesty, that, taking into his royal consideration the many and great calamities which had attended the present unfortunate war, and the heavy burdens thereby brought on his loyal and affectionate people, he would be graciously

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Protest against receiving him.

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Motion for an address against the American war rejected.

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ciously pleased to listen to the humble prayer and advice of his faithful commons, that the war on the continent of North America might no longer be pursued for the impracticable purpose of reducing that country to obedience by force; and expressing their hope that the earnest desire and diligent exertion to restore the public tranquillity, of which they had received his majesty's most gracious assurances, might, by a happy reconciliation with the revolted colonies, be forwarded and made effectual; to which great end, his majesty's faithful commons would be ready most cheerfully to give their utmost assistance." In the speech by which he introduced this motion, the general set forth the enormities with which the British arms had so frequently been stigmatized by opposition, and the excessive animosity of the Americans. Not a single friend to the British government (he said) could be discovered amongst the inhabitants of North America from one end of the country to the other. We had, indeed, at present no object to contend for: for if it could be admitted for a moment, even for the sake of argument, that it were possible we might conquer at the last, what benefits would repay the struggle for the victory? We should then only gain a desert, a country depopulated by the war, which our despotism and barbarity, our avarice and ambition, our antipathy for freedom, and our passion for injustice, had kindled in her bosom. But all expectations of this kind were in the highest degree vain and absurd; though he had received intelligence (the general said) from a person lately arrived from America, in whose veracity, experience, and discernment, he could implicitly confide, that the people of that country, although in arms against us, were still anxious for the accomplishment of peace. He was also assured, that certain individuals, at no considerable distance, were empowered on the part of the congress to treat with the ministers of Great Britain for the attainment of so essential an object. These circumstances were not unknown to government; and a noble lord, who had lately retired from the office of secretary of state for the American department, had been particularly applied to on this interesting occasion. What reason could the ministers assign why they had neglected to improve this singular advantage, and seemed to spurn at all ideas of negotiation? Could it be possible, that a series of ignominious miscarriages and defeats had not yet operated as a cure for the inhuman and destructive love of war? Such was the situation of the nation, that it behoved the ministers to negotiate for peace almost on any terms. But as they had hitherto done nothing of this kind, it was indispensably necessary that the parliament should interfere, and put an immediate end to a war so calamitous, so fatal, and so destructive. The motion was seconded by lord John Cavendish, who remarked, that the American war had been a war of malice and resentment, without either dignity in its conduct, probability in its object, or justice in its origin. It was, however, vigorously opposed by administration, who had still sufficient strength to gain their point, though only by a single vote, the motion being rejected by 194 to 193.

The increasing strength of opposition now showed that the downfall of ministry was at hand. The decision of the last question was considered as a victory

gained by the former; and Mr Fox instantly gave notice that the subject would be resumed in a few days, under another form. It was accordingly revived on the 27th of February; on which day a petition from the city of London was presented to the house, soliciting the house to interpose in such a manner as should prevent any farther prosecution of the American war; after which general Conway moved, that it should be resolved, "That it was the opinion of that house, that the farther prosecution of offensive war on the continent of North America, for the purpose of reducing the revolted colonies to obedience by force, would be the means of weakening the efforts of this country against her European enemies, and tend, under the present circumstances, dangerously to increase the mutual enmity so fatal to the interests both of Great Britain and America; and, by preventing a happy reconciliation with that country, to frustrate the earnest desire graciously expressed by his majesty to restore the blessings of public tranquillity."

In the speech by which he introduced this motion, the general took notice of some objections that had been made to his former motion, under the idea that it was unconstitutional in that house to interfere with its advice in those things which especially and indistinctly belonged to the executive power. It appeared, however, from the journals, that from the days of Edward III. down to the present reign, parliament had at all times given advice to the crown in matters relating to war and peace. In the reign of Richard II. it was frequently done; and also in that of Henry IV. One remarkable instance of this was in the reign of Henry VII. when that prince consulted his parliament respecting the propriety of supporting the duke of Brittany against France, and also of declaring war against the latter; and he told his parliament, that it was for no other purpose than to hear their advice on these heads that he called them together. In the reign of James I. the parliament interfered repeatedly with their advice respecting the Palatinate, the match with Spain, and a declaration of war against that power. In the time of Charles I. there were similar interferences; and in the reign of his son Charles II. the parliament made repeated remonstrances, but particularly in 1674 and 1675, on the subject of the alliance with France, which they urged ought to be renounced, and at the same time recommended a strict union with the united provinces. To some of these remonstrances, indeed, answers were returned not very satisfactory; and the parliament were informed, that they were exceeding the line of their duty, and encroaching upon the prerogative of the crown. But so little did the commons of those days relish these answers, that they addressed the king to know who it was that had advised his majesty to return such answers to their loyal and constitutional remonstrances. In the reign of king William, repeated instances were to be found in the journals of advice given by parliament relative to the Irish war and the war on the continent. The like occurred frequently in the reign of queen Anne: that princess, in an address from the parliament, was advised not to make peace with France until Spain should be secured to Austria; and also, not to consent to peace until Dunkirk should be demolished. In short, it was manifest from the whole history

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Second motion for the address.

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Parliament has a right to advise the king.

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Motion for
the address
carried.

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Address
presented,
with his
majesty's
answer.

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Second
address.

of English parliaments, that it was ever considered as constitutional for parliament to interfere, whenever it thought proper, in all matters so important as those of peace and war. The general urged other arguments in support of his motion, which was seconded by lord Althorpe; and petitions from the mayor, burgesses, and commonalty of the city of Bristol, and from the merchants, tradesmen, and inhabitants of that city, against the American war, were read. In order to evade coming to any immediate determination on the question, a proposition was made by Mr Wallace, the attorney-general, that a truce should be entered into with America; and that a bill should be prepared to enable his majesty's ministers to treat on this ground: and under the pretence of allowing time for this measure, he moved, "that the present debate should be adjourned for a fortnight." The house divided upon this motion, when there appeared for it 215, and against it 234; so that there was a majority of 19 against the ministry. The original motion of general Conway was then put and carried without a division. The general immediately followed up his first motion with another for an address to the king, in which the American war was spoken of precisely in the same terms made use of in the motion, and in which his majesty was solicited to put a stop to any farther prosecution of offensive war against the colonies. This motion was agreed to; and it was also resolved, that the address should be presented to his majesty by the whole house. The address was accordingly presented on the first of March; when his majesty returned an answer, in which he declared, that there were no objects nearer to his heart than the ease, happiness, and prosperity of his people; that the house of commons might be assured, that, in pursuance of their advice, he should take such measures as should appear to him to be most conducive to the restoration of harmony between Great Britain and her revolted colonies, so essential to the prosperity of both; and that his efforts should be directed, in the most effectual manner, against our European enemies, until such a peace could be obtained as should consist with the interests and permanent welfare of his kingdoms. But though the proceedings of the house of commons, in addressing his majesty against any farther prosecution of the American war, gave general satisfaction, the royal answer, however, was not thought sufficiently explicit. It was therefore observed by general Conway, in the house of commons, on the 4th of March, that he hoped he should be supported by the house in his desire of securing the nation against the possibility of a doubt that the American war was not now completely concluded. Something, perhaps, might yet be wanting, by which ministers might be so expressly bound, that, however desirous of evasion, they would not have it in their power to evade the injunction of that house. He therefore moved, "That an humble address should be presented to his majesty, to return his majesty the thanks of that house for his gracious answer to their last address; that house being convinced, that nothing could, in the present circumstances of this country, so essentially promote those great objects of his majesty's paternal care for his people as the measures which his faithful commons had most humbly, but earnestly, recommended to his majesty."

This motion was unanimously agreed to; after which the general made a second motion, that it should be resolved by that house, "That, after the solemn declaration of the opinion of that house, in their humble address presented to his majesty on Friday last, and his majesty's assurance of his gracious intention, that house would consider as enemies to his majesty and this country, all those who should endeavour to frustrate his majesty's paternal care for the ease and happiness of his people, by advising, or by any means attempting, the farther prosecution of offensive war on the continent of North America, for the purpose of reducing the revolted colonies to obedience by force." After some debate, the motion was agreed to without a division; and on the 6th of the month, after a number of papers had been read in the house of peers relative to the surrender of earl Cornwallis and the army under his command, the two following motions were made by the duke of Chandos. First, "That it was the opinion of that house, that the immediate cause of the capture of the army under earl Cornwallis in Virginia, appeared to have been the want of a sufficient naval force to cover and protect the same." Secondly, "That the not covering and protecting the army under earl Cornwallis in a proper manner, was highly blameable in those who advised and planned the expedition." After some debate, the motions were rejected, upon a division, by a majority of 72 to 37.

Thus the ministry still kept their ground, and with the most astonishing resolution combated the powers of opposition, which were daily increasing. On the 8th of March several resolutions were moved by lord John Cavendish; one of which was, that "the chief cause of all the national misfortunes was the want of force and ability in his majesty's ministers." Another respected the immense sum expended on the war, which was not denied to be less than 100 millions. The expenditure of this sum became an object of severe scrutiny; but still all inquiry was frustrated. Mr Burke affirmed, that all public documents relative to the finances, exhibited the mismanagement, profusion, and enormities, of an unprincipled administration; as an instance of which he adduced the presents given to the Indians for their services during the last year, amounting to no less than 100,000 l. Several other particulars were pointed out; but the motions were lost by 226 to 216.

The unpopularity of lord North was now farther augmented by his proposal of some new taxes, particularly on soap, the carriage of goods, and places of entertainment. Opposition therefore still determined to force him to resign; which indeed it seemed improbable that he would voluntarily do. On the 15th of March it was moved by Sir John Rous, that "the nation could have no farther confidence in the ministers who had the conduct of public affairs." The debate was remarkable for an argument, in the affair of America, perfectly original, and unprecedented in all that had been said or written on the subject. Sir James Marriot informed the house, that though it had been frequently pretended, that the inhabitants of the colonies were not represented in the British parliament, yet the fact was otherwise; for they were actually represented. The first colonization, by national and sovereign authority, he remarked, was the establishment of the

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Resolutions
concerning
the capture
of Corn-
wallis re-
jected.

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Resolutions
against mi-
nistry pro-
posed.

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Another
motion a-
gainst the
ministry.

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Britain. the colony of Virginia. The grants and charters made of those lands, and of all the subsequent colonies, were of one tenor, and expressed in the following terms: "To have and to hold of the king or queen's majesty, as part and parcel of the manor of East Greenwich, within the county of Kent, *reddendum*, a certain rent at our castle of East Greenwich, &c." So that the inhabitants of America were, in fact, by the nature of their tenure, represented in parliament by the knights of the shire for the county of Kent. This curious legal discovery, that the American colonies were part and parcel of the manor of East Greenwich, though delivered by the learned judge with all proper gravity and solemnity, yet excited so much merriment in the house, that it was with great difficulty, for some time, that the speaker could preserve any kind of order.

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Lord North's defence of his own conduct.

Lord North endeavoured to vindicate his own administration. He affirmed, that it could not be declared with truth, by that house, that the national calamities originated from the measures of the present administration. The repeal of the American stamp-act, and the passing of the declaratory law, took place before his entrance into office. As a private member of parliament, he gave his vote in favour of both; but, as a minister, he was not responsible for either. When he accepted his post, the times were scarcely less violent than the present. He approached the helm when others had deserted it; and, standing there, he had used his utmost efforts to assist his country. That the American war was just and requisite, and prosecuted for the purpose of supporting and maintaining the rights of the British legislature, was a position, for the truth of which he would ever contend, whilst he enjoyed the power of arguing at all upon the subject. As to peace, he not only wished most earnestly for it, but also for the formation of such a ministry as might at once prove welcome to the country, and with unanimous cordiality co-operate for the welfare and the honour of the state. It was not an attachment to the honours and emoluments of office which had kept him so long in place; and he should disdain to throw impediments in the way of any honourable and salutary coalition of parties, though for the adjustment of an administration from which he might perceive himself excluded. The house at length divided upon the question, when there appeared for it 227, and against it 236; so that there was a majority of nine in favour of administration.

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The ministers at last quit their places.

Notwithstanding this seemingly favourable determination, it was so well known that the ministry could not stand their ground, that, four days after, a similar motion to that made by Sir John Rous was to have been made by the earl of Surrey; but when his lordship was about to rise for that purpose, lord North addressed himself to the speaker, and endeavoured to gain the attention of the house. This occasioned some altercation, it being contended by many members, that the earl of Surrey ought to be heard first. But lord North being at length suffered to proceed, he observed, that as he understood the motion to be made by the noble earl was similar to that made a few days before, and the object of which was the removal of the ministers, he had such information to communicate to the house, as must, he conceived, render any such motion now unnecessary. He could with authority assure the

house, that his majesty had come to a full determination to change his ministers. Indeed, those persons who had for some time conducted the public affairs were no longer his majesty's ministers. They were not now to be considered as men holding the reins of government, and transacting measures of state, but merely remaining to do their official duty, till other ministers were appointed to take their places. The sooner those new ministers were appointed, his lordship declared, that, in his opinion, the better it would be for the public business, and the general interests of the nation. He returned thanks to the house for the many instances of favour and indulgence which he had received from them during the course of his administration; and he declared, that he considered himself as responsible, in all senses of the word, for every circumstance of his ministerial conduct, and that he should be ready to answer to his country whenever he should be called upon for that purpose.

The earl of Surrey informed the house, that the motion which he intended to have made was designed to declare to the nation, and to all Europe, that the ministry were not dismissed because they wanted to avoid the fatigues of office, but because the parliament had totally withdrawn from them their good opinion and their confidence, and were determined no longer to permit the perpetration of those violent abuses of their trust, to which, with impunity, and to the disgrace and detriment of the state, they had for such a length of time proceeded. His lordship, however, agreed, in consequence of the declaration of lord North, to waive his intended motion; and, after some farther debate, the house adjourned.

Thus an end was put to an administration which had for so long been obnoxious to a great part of the nation, and whose removal contributed very much to allay those dangerous ferments by which every part of the British dominions had been so long agitated. Peace now became as much the object of ministry as war had been formerly. Before we proceed to any account of the negotiations for that desirable event, however, it will be necessary to take notice of those military events which disposed the other belligerent powers to an accommodation. The bad success of Britain in America has been already taken notice of. The disaster of Cornwallis had produced a sincere desire of being at peace with America; but that could not be accomplished without making peace with France also; and that power was haughty and elated with success. Minorca had now fallen into the hands of the Spaniards; and though it is certain that the capture of a few miserable invalids, attended with such extreme difficulty as the Spaniards experienced †, ought rather to have intimidated them than otherwise, they now projected the most important conquests. Nothing less than the entire reduction of the British West India islands became the object of the allies; and indeed there was too much reason to suppose that this object was within their reach. In the beginning of the year 1782, the islands of Nevis and St Christopher were obliged to surrender to M. de Grasse the French admiral, and the marquis de Bouille, who had already signalized himself by several exploits *. Jamaica was marked out as the next victim; but an end of all these aspiring hopes was fast approaching. The advantages hitherto

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Military operations in 1782.

† See Minorca.

* See Nevis and St Christopher.

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hitherto gained by the French in their naval engagements with the British fleet, had proceeded from their keeping at a great distance during the time of action, and from their good fortune and dexterity in gaining the wind. At last, the French Admiral, de Grasse, probably prompted by his natural courage, determined, after an indecisive action on the 9th of April 1782, to stand a close engagement with his formidable antagonist admiral Rodney. This, with him, appears to have been a matter of choice, as he interfered to prevent the loss of a disabled ship, by parting with which he might have avoided the disaster that followed. This memorable engagement took place off the island of Dominica, three days after the former. The British fleet consisted of 37 ships of the line, and the French of 34. The engagement commenced at seven o'clock in the morning, and continued with unremitting fury till half past six in the evening. It is said, that no other signal was made by the admiral but the general one for action, and that for close fight. Sir George Rodney was on board the *Formidable*, a ship of ninety guns; and the count de Grasse was on board the *Ville de Paris*, a ship of 110 guns, which was a present to the French king from the city of Paris. In the course of the action, the *Formidable* fired nearly 80 broadsides; and for three hours the admiral's ship was involved in so thick a cloud of smoke, that it was almost invisible to the officers and men of the rest of the fleet. The van division of the British fleet was commanded by Sir Samuel Hood, and the rear division by rear-admiral Drake; and both these officers greatly distinguished themselves in this important action. But the decisive turn on this memorable day was given by a bold manœuvre of the *Formidable*, which broke the French line, and threw them into confusion. The first French ship that struck was the *Cæsar*, a 74 gun ship, the captain of which fought nobly, and fell in the action. It is said, that when she struck she had not a foot of canvas without a shot-hole. Unfortunately, soon after she was taken possession of, she took fire by accident, and blew up, when about 200 Frenchmen perished in her, together with an English lieutenant and ten English seamen. But *le Glorieux* and *le Hector*, both 74 gun ships, were also taken by the British fleet; together with *l'Ardent* of 64 guns; and a French 74 gun ship was also sunk in the engagement. It was a very close and hard fought action on both sides, but the French fleet was at length totally defeated. It was almost dark when the *Ville de Paris* struck, on board which the count de Grasse had fought very gallantly. Five thousand five hundred troops were on board the French fleet, and the havoc among these was very great, as well as among the French seamen. The British had 230 killed and 759 wounded. Captain Blair, who commanded the *Anson*, and several other officers, were killed in the action; and lord Robert Manners, who commanded the *Resolution*, died of his wounds on his return home. On the 19th of the same month, a squadron which was detached from the main fleet, under the command of Sir Samuel Hood, captured the *Cato* and the *Jafon*, two French men of war of 64 guns each, and also *l'Aimable* of 32 guns, and the *Ceres* of 18. About the same time also the fleet under admiral Barrington took from the French, off Ushant,

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le *Pégase* of 74 guns, *l'Actionnaire* of 64, and ten sail of vessels under their convoy.

It was universally allowed, that in this engagement the French, notwithstanding their defeat, behaved with the greatest valour. De Grasse himself did not surrender till 400 of his people were killed, and only himself and two others remained without a wound. The captain of the *Cæsar*, after his ensign-staff was shot away, and the ship almost battered to pieces, caused his colours to be nailed to the mast, and thus continued fighting till he was killed. The vessel, when taken, was a mere wreck. Other French officers behaved in the same manner. The valour of the British requires no encomium; it was evident from their success.

This victory was a very fortunate circumstance both for the interest and reputation of the British admiral. Before this event, the new ministry had appointed admiral Pigot to supersede him in the command in the West Indies; and it was understood, that they meant to set on foot a rigid inquiry into the transactions at St Eustatius. But the splendor of his victory put an end to all thoughts of that kind: he received the thanks of both houses of parliament for his services; and was created an English peer, by the title of baron Rodney, of Rodney-Stoke, in the county of Somerset. Sir Samuel Hood was also created baron Hood of Catherington, in the kingdom of Ireland; and rear-admiral Drake, and captain Affleck, were created baronets of Great Britain. Some attempts were also made, in the house of commons, to procure a vote of censure against the new ministry, for having recalled lord Rodney; but the motions made for this purpose were rejected by the majority.

The count de Grasse, after his defeat, was received on board the *Baisleur* man of war, and afterwards landed on the island of Jamaica, where he was treated with great respect. After continuing there some time, he was conveyed to England, and accommodated with a suite of apartments at the Royal Hotel in Pall mall. His sword, which he had delivered up, according to the usual custom, to admiral Rodney, was returned to him by the king. This etiquette enabled him to appear at court, where he was received by their majesties and the royal family in a manner suitable to his rank. From the time of his arrival in London to his departure, which was on the 12th of August 1782, he was visited by many persons of the first fashion and distinction, and was much employed in paying visits to the great officers of state, and some of the principal nobility of the kingdom, by whom he was entertained in a very sumptuous and hospitable style. He received, indeed, every mark of civility which the British nation could bestow; and was treated with much respect even by the common people, from the opinion that was generally entertained of his valour and merit.

Though the designs of the French against Jamaica were now effectually frustrated, the victory was not followed by those beneficial consequences which by many were expected. None of the British islands which had been taken by the French in the West Indies were afterwards recaptured; though it was hoped that this would have been the result of our naval superiority in those seas. It was also an unfortunate circumstance, that some of those ships which were taken

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Britain.

Britain. by admiral Rodney were afterwards lost at sea; particularly the Ville de Paris, Glorieux, and Hector. A British man of war, the Centaur, of 74 guns, was also sunk in lat. 48 deg. 33 min. and long. 43 deg. 20 min. on the 24th of September 1782, in consequence of the disabled state to which it was reduced by some very violent storms. Before the ship sunk, the officers and crew had sustained great hardships: most of them at last went down with the ship; but the lives of captain Inglefield the commander, and ten other officers and seamen, were preserved by their getting on board a pinnace. But even this was leaky; and when they went into it they were nearly in the middle of the Western ocean, without compass, quadrant, great coat or cloak; all very thinly clothed, in a gale of wind, and with scarcely any provisions. After undergoing extreme hardships and fatigues for 16 days, they at length reached the island of Fayall, one of the Azores. They were so much reduced by want of food and incessant labour, that, after they had landed, some of the stoutest men belonging to the Centaur were obliged to be supported through the streets of Fayall. The Jamaica homeward bound fleet were also dispersed this year by a hurricane off the banks of Newfoundland, when the Ramillies of 74 guns and several merchantmen foundered.

The British navy also sustained, about this time, a considerable loss at home, by the Royal George, of 100 guns, being overset and sunk at Portsmouth. This melancholy accident, which happened on the 29th of August, was occasioned by a partial heel being given to the ship, with a view to cleanse and sweeten her; but the guns on one side being removed to the other, or at least the greater part of them, and her lower deck ports being not lashed in, and the ship thwarting on the tide with a squall from the north-west, it filled with water, and she sunk in the space of about three minutes. Admiral Kempenfelt, a very brave and meritorious officer, other officers, upwards of 400 seamen and 200 women, besides many children, perished in her.

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Hudson's
bay and the
Bahama
islands re-
duced.

Thus the prosecution of the war seemed to be attended with endless disasters and difficulties to all parties. The signal defeat above mentioned not only secured the island of Jamaica effectually from the attempts of the French, but prevented them from entertaining any other project than that of distressing the commerce of individuals. In the beginning of May an expedition was undertaken to the remote and inhospitable regions of Hudson's Bay; and though no force existed in that place capable of making any resistance, a 74 gun ship and two 36 gun frigates were employed on the service. All the people in that part of the world either fled or surrendered at the first summons. The loss of the Hudson's bay company, on this occasion, amounted to 500,000 l. but the humanity of the French commander was conspicuous in leaving a sufficient quantity of provisions and stores of all kinds for the use of the British who had fled at his approach.

Another expedition was undertaken by the Spaniards to the Bahama islands, where a like easy conquest was obtained. The island of Providence was defended only by 360 men, who being attacked by 5000, could make no resistance. A very honourable capitulation

was granted by the victors, who likewise treated the garrison with great kindness afterwards. Some settlements on the Mosquito shore were also taken by the Spaniards: but the Bay-men, assisted by their negroes, bravely retook some of them; and having formed a little army with the Indians in those parts, headed by colonel Despard, they attacked and carried the posts on the Black River, making prisoners of about 800 Spanish troops. The great disaster which befel this power, however, was their failure before Gibraltar, which happened in the month of September 1782, with such circumstances of horror and destruction as evinced the absurdity of persisting in the enterprise. Thus all parties were taught that it was high time to put an end to their contests. The affair of Cornwallis had shown that it was impossible for Britain to conquer America; the defeat of de Grasse had rendered the reduction of the British possessions in the West Indies impracticable by the French; the final repulse before Gibraltar, and its relief afterwards by the British fleet †, put an end † See 678. to that favourite enterprise, in which almost the whole strength of Spain was employed; while the engagement of the Dutch with admiral Parker showed them that nothing could be gained by a naval war with Britain.

We have already taken notice, as fully as the limits of this article would admit, of the events which led to the removal of lord North and the other ministers who for so long time had directed public measures in this kingdom. On this occasion it was said that his majesty expressed a considerable agitation of mind at being in a manner compelled to make such an entire change in his councils; for the members in opposition would form no coalition with any of the old ministry, the lord chancellor only excepted. On the 27th and 30th of March 1782, the marquis of Rockingham was appointed first lord of the treasury; lord John Cavendish chancellor of the exchequer; the earl of Shelburne and Mr Fox principal secretaries of state; lord Camden president of the council; the duke of Richmond master of the ordnance; the duke of Grafton lord privy seal; admiral Keppel first lord of the admiralty; general Conway commander in chief of all the forces in Great Britain; Mr Thomas Townshend secretary at war; Mr Burke paymaster of the forces; and colonel Barré treasurer of the navy. Other offices and honours were likewise conferred on different members of the opposition; and some were raised to the peerage, particularly admiral Keppel, Sir Fletcher Norton, and Mr Dunning.

680
Negotia-
tions for
peace.

The first business in which the new ministry engaged, was the taking such measures as were proper to effectuate a general peace. No time was lost in the pursuit of this great object, or in taking the necessary steps for its attainment. Accordingly, the empress of Russia having offered her mediation, in order to restore peace between Great Britain and Holland, Mr secretary Fox, within two days after his entrance into office, wrote a letter to Mons. Simolin, the Russian minister in London, informing him, that his majesty was ready to enter into a negotiation for the purpose of setting on foot a treaty of peace, on the terms and conditions of that which was agreed to in 1674 between his majesty and the republic of Holland; and that, in order

Britain. order to facilitate such a treaty, he was willing to give immediate orders for a suspension of hostilities, if the states-general were disposed to agree to that measure.

But the states of Holland did not appear inclined to a separate peace; nor perhaps would it have been agreeable to the principles of sound policy, if they had agreed to any propositions of this kind. However, immediately after the change of ministry, negotiations for a general peace were commenced at Paris. Mr Grenville was invested with full powers to treat with all the parties at war; and was also directed to propose the independency of the 13 United Provinces of America, in the first instance, instead of making it a condition of a general treaty. Admiral Digby and general Carleton were also directed to acquaint the American congress with the pacific views of the British court, and with the offer that was made to acknowledge the independence of the United States.

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Death of the marquis of Rockingham occasions new changes in the ministry.

But before this work of pacification had made any considerable progress, the new ministry sustained an irreparable loss by the death of the marquis of Rockingham in July 1782. Even before this event, considerable apprehensions were entertained of their want of union; but the death of the nobleman just mentioned occasioned an absolute dissolution. The earl of Shelburne, who succeeded him as first lord of the treasury, proved so disagreeable to some of his colleagues, that Mr Fox, lord John Cavendish, Mr Burke, Mr Frederic Montagu, and two or three others, instantly resigned their places. Others, however, though little attached to the earl, kept their places; and his lordship found means to attach to his interest Mr William Pitt, son to the late earl of Chatham. Though then in an early stage of life, that gentleman had distinguished himself greatly in parliament, and was now prevailed upon to accept the office of chancellor. The seceding members of the cabinet were at great pains to explain their motives to the house for taking this step. These were in general a suspicion that matters would be managed differently from the plan they had proposed while in office, and particularly that American independence would not be allowed: but this was positively denied at the time; and with truth, as appeared by the event. There appeared indeed a duplicity in the conduct of the earl of Shelburne not easily to be accounted for. Even after it had been intimated by general Carleton and admiral Digby, that the independence of the united provinces should be granted by his majesty in the first instance, instead of making it a condition of a provisional treaty, his lordship expressed himself to the following purpose: "He had formerly been, and still was, of opinion, that whenever the independence of America was acknowledged by the British parliament, the sun of England's glory was set for ever. This had been the opinion of lord Chatham and other able statesmen; nevertheless, as the majority of the cabinet were of a contrary opinion, he acquiesced in the measure, though his ideas were different. He did not wish to see England's sun set for ever, but looked for a spark to be left which might light us up a new day. He wished to God that he had been deputed to congress, that he might plead the cause of America as well as Britain. He was convinced that the liberties of the former were gone as soon as the independence of the states was allowed: and he con-

cluded his speech with observing, that he was not afraid of his expressions being repeated in America; there being great numbers there who were of the same opinion with him, and perceived ruin and independence linked together."

If his lordship really was of opinion that his oratorical powers were able to persuade the Americans out of a system for which they had fought so desperately for a number of years, it is much to be feared he over-rated them. No obstruction, however, arose to the general pacification. As early as November 30th 1782, the articles of a provisional treaty were settled between Britain and America†. By these it was stipulated, that the people of the united states should continue to enjoy, without molestation, the right to take fish of every kind on the grand bank, and on all the other banks of Newfoundland; and that they should likewise exercise and continue the same privilege in the gulph of St Lawrence, and at every other place in the sea, where the inhabitants used heretofore to fish. The inhabitants of the united states were likewise to have the liberty to take fish of every kind on such part of the coast of Newfoundland as British seamen shall resort to; but not to cure or dry them on that island. They were also to possess the privilege of fishing on the coasts, bays, and creeks of all the other dominions of his Britannic majesty in America; and the American fishermen were permitted to cure and dry fish in any of the unsettled bays, harbours, and creeks of Nova Scotia, Magdalen islands, and Labrador. But it was agreed, that, after such places should be settled, this right could not be legally put in practice without the consent of the inhabitants and proprietors of the ground. It was accorded, that creditors upon either side should meet with no impediment in the prosecution of their claims. It was contracted that the congress should earnestly recommend it to the legislatures of the respective states, to provide for the restitution of all estates and properties which had been confiscated, belonging to real British subjects, and of the estates and properties of persons resident in districts in the possession of his majesty's arms, and who had not borne arms against the united states. It was resolved, that persons of any other description should have free liberty to go to any part whatsoever of any of the thirteen united states, and remain in it for twelve months unmolested in their endeavours to recover such of their estates, rights, and properties, as might not have been confiscated; and it was concerted that the congress should earnestly recommend to the several states a revision of all acts or laws regarding the premises, so as to render them perfectly consistent, not only with justice and equity, but with that spirit of conciliation which, on the return of the blessings of peace, should universally prevail. It was understood that no future confiscations should be made, nor prosecutions commenced against any person, or body of men, on account of the part which he or they had taken in the present war; and that those who might be in confinement on such a charge, at the time of the ratification of the treaty in America, should be immediately set at liberty. It was concluded that there should be a firm and perpetual peace between his Britannic majesty and the united states; that all hostilities by sea and land should immediately cease; and that prisoners on both sides

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Gives occasion to the Americans to rail against Britain.

† See America, n^o 389.

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Articles of the provisional treaty with America.

682
Strange speech of lord Shelburne on American independence.

Britain. should be set at liberty. It was determined that his Britannic majesty should expeditiously, and without committing destruction of any sort, withdraw all his armies, garrisons, and fleets, from every port, place, and harbour, of the united states. The navigation of the river Mississippi, from its source to the ocean, was to remain for ever free and open to the subjects of Great Britain and the citizens of the united states. In fine, it was agreed in the event, that if any place or territory belonging to Great Britain, or to the united states, should be conquered by the arms of either before the arrival of the provisional articles in America, it should be restored without compensation or difficulty.

685
Preliminary
articles
with
France;

In the treaty between Great Britain and France, it was agreed that Newfoundland should remain with England, as before the commencement of the war; and, to prevent disputes about boundaries, it was accorded that the French fishery should begin from Cape St John on the eastern side, and going round by the north, should have for its boundary Cape Ray on the western side. The islands of St Pierre and Miquelon, which had been taken in September 1778, were ceded in full right to France. The French were to continue to fish in the gulph of St Laurence, conformably to the fifth article of the treaty of Paris. The king of Great Britain was to restore to France the island of St Lucia, and to cede and guarantee to her that of Tobago. The king of France was to surrender to Great Britain the islands of Grenada and the Grenadines, St Vincent, Dominica, St Christopher's, Nevis, and Mountserrat. The river of Senegal and its dependencies, with the forts of St Louis, Podor, Galam, Arguin, and Portendic, were to be given to France; and the island of Goree was to be restored to it. Fort James and the river Gambia were guaranteed to his Britannic majesty; and the gum trade was to remain in the same condition as before the commencement of hostilities. The king of Great Britain was to restore to his most Christian majesty all the establishments which belonged to him at the breaking out of the war on the coast of Orixá and in Bengal, with the liberty to surround Chandernagor with a ditch for draining the waters; and became engaged to secure to the subjects of France in that part of India, and on the coasts of Orixá, Coromandel, and Malabar, a safe, free, and independent trade, either as private traders, or under the direction of a company. Pondicherry, as well as Karical, was to be rendered back to France; and his Britannic majesty was to give as a dependency round Pondicherry the two districts of Valanour and Bahour; and as a dependency round Karical, the four contiguous Magane. The French were again to enter into the possession of Mahe, and of the comptoir at Surat. The allies of France and Great Britain were to be invited to accede to the present pacification; and the term of four months was to be allowed them, for the purpose of making their decision. In the event of their aversion from peace, no assistance on either side was to be given to them. Great Britain renounced every claim with respect to Dunkirk. Commissioners were to be appointed respectively by the two nations to inquire into the state of their commerce, and to concert new arrangements of trade on the footing of mutual convenience. All conquests on either side, in any part of the world whatsoever, not mentioned nor

Britain. alluded to in the present treaty, were to be restored without difficulty, and without requiring compensation. It was determined that the king of Great Britain should order the evacuation of the islands of St Pierre and Miquelon, three months after the ratification of the preliminary treaty; and that, if possible, before the expiration of the same period, he should relinquish all connection with St Lucia in the West Indies, and Goree in Africa. It was stipulated in like manner, that his Britannic majesty should, at the end of three months after the ratification of the treaty, or sooner, enter into the possession of the islands of Grenada and the Grenadines, St Vincent, Dominica, St Christopher's, Nevis, and Mountserrat. France was to be put into possession of the towns and comptoirs which were to be restored to her in the East Indies, and of the territories which were to serve as dependencies round Pondicherry and round Karical, six months after the ratification of the definitive treaty; and at the termination of the same term she was to restore the towns and districts which her arms might have taken from the English or their allies in that quarter of the globe. The prisoners upon each side were reciprocally to be surrendered, and without ransom, upon the ratification of the treaty, and on paying the debts they might have contracted during their captivity. Each crown was respectively to reimburse the sums which had been advanced for the maintenance of their prisoners by the country where they had been detained, according to attested and authentic vouchers. With a view to prevent every dispute and complaint on account of prizes which might be made at sea after the signing of the preliminary articles, it was mutually settled and understood that the vessels and effects which might be taken in the Channel, and in the North seas, after the space of twelve days, to be computed from the ratification of the present preliminary articles, were to be restored upon each side; that the term should be one month from the Channel and the North Seas, as far as the Canary islands inclusively, whether in the ocean or the Mediterranean; two months from the Canary islands as far as the equinoctial line or equator; and lastly, five months without exception in all other parts of the world.

These preliminary articles of peace were concluded at Versailles on the 20th of January 1783, between Mr Alleyne Fitzherbert, minister plenipotentiary on the part of his Britannic majesty, and Charles Gravier, comte de Vergennes, the minister plenipotentiary on the part of the king of France. At the same time the preliminary articles of peace between Great Britain and Spain were also concluded at Versailles between Mr Fitzherbert and the comte d'Aranda, the minister plenipotentiary for the Spanish monarch. It was agreed that a sincere friendship should be re-established between his Britannic majesty and his Catholic majesty, their kingdoms, states, and subjects by sea and land in all parts of the world. His Catholic majesty was to keep the island of Minorca; and was to retain West Florida. East Florida was to be ceded to him by the king of Great Britain. Eighteen months from the date of the ratification of the definitive treaty were to be allowed to the subjects of the latter who had settled in the island of Minorca and in the two Floridas, to sell their estates, to recover their debts, and to transport.

Britain.

port their persons and effects, without being restrained upon account of their religion, or on any other pretence whatsoever except that of debts and prosecutions for crimes. His Britannic majesty was, at the same time, to have the power to cause all the effects that might belong to him in East Florida, whether artillery or others, to be carried away. The liberty of cutting logwood in a district of which the boundaries were to be ascertained, without molestation or disturbance of any kind whatsoever, was permitted to Great Britain. The king of Spain was to restore the islands of Providence, and the Bahamas, without exception, in the condition in which they were when they were conquered by his arms. All other conquests of territories and countries upon either side, not included in the present articles, were to be mutually restored without difficulty or compensation. The epoch for the restitutions to be made, and for the evacuations to take place, the regulations for the release of prisoners, and for the cessation of captures, were exactly the same as those which have already been related, as stipulated in the preliminary articles with France.

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The peace
vehemently
condemned.

No sooner were these articles ratified and laid before parliament, than the most vehement declamations against ministry took place. Never had the administration of lord North himself been arraigned with more asperity of language. The ministry defended themselves with great resolution; but found it impossible to avoid the censure of parliament. An address without any amendment was indeed carried in the house of lords by 72 to 59; but in the lower house it was lost by 224 to 208. On the 21st of February, some resolutions were moved in the house of commons by lord George Cavendish, of which the most remarkable were, that the concessions made by Britain were greater than its adversaries had a right to expect; and that the house would take the case of the American loyalists into consideration. The last motion indeed his lordship consented to wave; but all the rest were carried against ministry by 207 to 190. These proceedings, however, could make no alteration with regard to the treaty, which had already been ratified by all the contending powers, the Dutch only excepted. The terms offered them were a renewal of the treaty of 1674: which, though the most advantageous they could possibly expect, were positively refused at that time. Afterwards they made an offer to accept the terms they had formerly refused; but the compliment was then returned by a refusal on the part of Britain. When the preliminary articles were settled with the courts of France and Spain, a suspension of arms took place with Holland also; but though the definitive arrangements with the other powers were finally concluded by the month of September, it was not till then that the preliminary articles were settled with Holland. The terms were a general restitution of all places taken on both sides during the war, excepting only the settlement of Negapatnam in the East Indies, which was to remain in the hands of Britain, unless an equivalent was given on the part of Holland. The navigation of the eastern seas was to remain free and unmolested to all the British shipping. The other articles concerned only the exchange of prisoners, and such other matters as are common to all treaties.

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Peace concluded with
the Dutch.

Thus an end was put to the most dangerous war in which Britain was ever engaged; and in which, notwithstanding the powerful combination against her, she still remained in a state of superiority to all her enemies. At that time, and ever since, it has appeared, how much the politicians were mistaken who imagined that the prosperity of Britain depended in a great measure on her colonies: Though for a number of years she had not only been deprived of these colonies, but opposed by them with all their force; though attacked at the same time by three of the greatest powers in Europe, and looked upon with an invidious eye by all the rest; the damages done to her enemies still greatly exceeded those she had received. Their trade by sea was almost ruined; and on comparing the loss of ships on both sides, the balance in favour of Britain was 28 ships of the line and 37 frigates, carrying in all near 2000 guns. Notwithstanding this, however, the state of the nation appears to have been really such, that a much longer continuance of the war would have been impracticable. In the debates, which were kept up with the greatest violence on account of the peace, Mr Pitt set forth our situation with great energy and strength of argument. "It was in vain (he said) to boast of the strength of our navy; we had not more than 100 sail of the line: but the fleet of France and Spain amounted nearly to 140 ships of the line. A destination of 72 ships of the line was to have acted against Jamaica. Admiral Pigot had only 46 sail to support it; and it was a favourite maxim of many members of the house, that defensive war must terminate in certain ruin. It was not possible that admiral Pigot could have acted offensively against the islands of the enemy; for lord Rodney, when flushed with victory, did not dare to attack them. Would admiral Pigot have recovered by arms what the ministers had regained by negotiation? With a superior fleet against him, and in its sight, is it to be conceived that he could have retaken Grenada, Dominica, St Christopher's, Nevis, and Montserrat? On the contrary, is it not more than probable that the campaign in the West Indies must have terminated in the loss of Jamaica?"

"In the east, it was true that the services of Sir Edward Hughes had been highly extolled; but he could only be commended for a merely defensive resistance. Victory seemed to be out of the question; and he had not been able to prevent the disembarkation of a powerful European armament which had joined itself to Hyder Ally, and threatened the desolation of the Carnatic†. At home and in our own seas the fleets of the enemy would have been nearly double to ours. We might have seized the intervals of their cruize, and paraded the channel for a few weeks; but that parade would have only served to disgrace us. It was yet the only achievement in our power; for to have hazarded an engagement would have been equivalent to a surrender of the kingdom.

"Neither, in his opinion, was the state of our army to be considered as formidable. New levies could not be raised in a depopulated country. We might send upon an offensive scheme five or six thousand men: and what expectation could be excited by a force of this kind? To have withdrawn troops from America was a critical game. There were no transports in which they

Britain.

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Event of
the war
more favourable to
Britain than
her enemies.

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Mr Pitt's
account of
the state of
the nation
at the conclusion of
the peace.

† See Ind.
doctans.

Britain.

might be embarked; and if it had been possible to embark them, in what miraculous manner were they to be protected against the fleets of the enemy?

"As to our finances, they were melancholy. Let the immense extent of our debts be weighed; let our resources be considered; and let us then ask, what would have been the consequence of the protraction of the war? It would have endangered the bankruptcy of public faith; and this bankruptcy, it is obvious, if it had come upon us, might have dissolved all the ties of government, and have operated to the general ruin.

"To accept the peace on the terms already related, or to continue the war, was the only alternative in the power of ministers. Such was the *ultimatum* of France. At the same time, however, it ought to be remembered, that the peace obtained was better than could have been expected from the lowness of our condition. We had acknowledged the American independence; but what was that but an empty form? We had ceded Florida; but had we not obtained the islands of Providence and the Bahamas? We had granted an extent of fishery on the coast of Newfoundland; but had we not established an exclusive right to the most valuable banks? We had restored St Lucia, and given up Tobago; but had we not regained Grenada, Dominica, St Christopher's, Nevis, and Montserrat? And had we not rescued Jamaica from inevitable danger? In Africa we had given Goree; but Goree was the grave of our countrymen; and we had secured Fort James and the river Gambia, the best and the most healthy settlement. In Europe we had relinquished Minorca; but Minorca is not tenible in war, and in peace it must be supported at a ruinous expence. We had permitted the reparation of the port of Dunkirk: but Dunkirk could only be an object when ships of a far inferior draught to the present were in use; the change in the operations of naval war had taken away its importance. In the East Indies cessions had been made; but let it be remarked that these cessions are inconsiderable in themselves, and could not be protected by us in the event of hostilities. In fine, it was objected that we had abandoned the unhappy loyalists to their implacable enemies. What is this but to impute to congress by anticipation a violence which common decency forbids us to expect? But let it be considered, that the principle of assisting these unfortunate men would not have justified ministers to have continued the war. And let it be considered, that a continuation of the war would not have procured them any certain indemnity. The accumulation of our distresses must have added to theirs. A year or two hence, harder terms of peace might have been forced upon our acceptance. Their fate then must have been desperate indeed! But as matters were now situated, there were hopes of mercy and reconciliation."

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A general distrust and narrative. It has repeatedly been observed, that thro' suspicion of the violence of parties, a general temper of distrust and treachery prevailed during the war. Having thus given as full an account as our limits would allow of the great national events to the conclusion of the peace in 1783, we shall now give a detail of some others, which though of sufficient importance to deserve notice, could not without interrupting the

given in the case of Mr Sayre. From certain circumstances, however, it appeared, that there undoubtedly were persons in the kingdom who wished if possible to destroy the national strength in such a manner as to render it impossible for us to make head against the attempts of our enemies. On the 8th of December 1776, a fire broke out in the ropehouse of the dock-yard at Portsmouth, which totally consumed it, but without doing any very material damage. For some time the affair passed as an accident; but in clearing away the rubbish, a tin-box was found with a wooden bottom, containing matches which had been lighted, and underneath was a vessel with spirit of wine: however, the fire not having been properly supplied with air, had extinguished of itself before it touched the spirit of wine. Had it caught fire, all the stores in the storehouse, sufficient to rig out 50 sail of men of war, would have been destroyed. In the beginning of the year 1777, a fire happened at Bristol, which consumed six or seven warehouses; and by the finding of machines similar to those already mentioned, it was evident that the fire had not been accidental. The terror of the public was now greatly increased, and the most violent accusations against each other were thrown out by the ministerial and popular parties. On this point, however, they soon came to a right understanding, by the discovery of the author of all this mischief. This was one James Aitken, *alias* John the Painter, a native of Edinburgh. Having been from his early years accustomed to a vagrant life, to which indeed his profession naturally led him, he had gone through many different adventures. He had enlisted as a soldier, deserted, and when pinched by want, made no scruple of betaking himself to the highway, or committing thefts. Having traversed a great part of America, he there imbibed the prejudices against Britain to such a degree, that he at last took the extraordinary resolution of singly overturning the whole power of the nation. This he was to accomplish by setting on fire the dockyards at Portsmouth and Plymouth, and afterwards the principal trading towns of the nation. With this view, he inspected with the utmost care those docks and other places on which his attempts were to be made, in order to learn with what care they were guarded. This he found in general as negligent as he could wish; and indeed had he not been some way or other very deficient in the construction of his machines, he must certainly have done a great deal of mischief: for as his attempts were always discovered by finding his machines, it was apparent that he had met with abundance of opportunities.

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He is apprehended, tried, and executed. For some time the affair at Portsmouth passed, as has already been mentioned, for an accident. It was soon recollected, however, that a person had been seen loitering about the rope-house, and had even been locked up one night in it; that he had worked as a painter, and taken frequent opportunities of getting into that house, &c. These circumstances exciting a suspicion that he was the incendiary, he was traced to different places, and at last found in a prison; to which he had been committed for a burglary. On his examination, however, he behaved with such assurance and apparent consciousness of innocence, as almost disconcerted those who were authorised. At last he

Britain.

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Heightened by a fire at Portsmouth.

693
And at Bristol.

694
The incendiary discovered.

Britain. he was deceived into a confession by another painter, who was likewise an American, and pretended to compassionate his case. Thus evidence was procured against him, but he still maintained his character to the very last; rejecting and invalidating the testimony of his false friend, on account of his baseness and treachery. He received his sentence with great fortitude; but at length not only confessed his guilt, but left some directions for preventing the dock-yards and magazines from being exposed to the like danger in time to come.

Thus it appeared that the whole of this alarm of treason and American incendiaries was owing to the political enthusiasm of a wretched vagabond. Still, however, it appeared that the French court were very well acquainted with many particulars relating to the state of this kingdom, and the movements of our squadrons, which ought by all means to have been kept secret. These treacherous proceedings were first detected in the month of June 1780. One Ratcliffe, master of a cutter, gave information that he had been hired by one Mr Rogere to carry packets to France, for which he was to be paid 20 l. each time, and to have 100 l. besides at a certain period. Apprehending at last, however, that he might incur some danger by continuing this employment, he gave information of what was going on to one Mr Steward, a merchant at Sandwich, by whom his last packet was carried to the secretary of state. After being opened and sealed up again, it was returned, and he was directed to carry it to France as formerly: This was the fate of several succeeding packets, though it was some time before Ratcliffe saw the principal party concerned. At last this was accomplished by his complaining to Mr Rogere that he had not been paid the 100 l. according to promise. A meeting being thus procured, it was found that the person who gave intelligence to the enemy was one M. Henry de la Motte, a French gentleman then residing in London. On searching his house, no papers of any consequence were found; but on his arrival, he being absent when the messengers first arrived, he threw some out of his pocket, unperceived by any body, as he thought. The papers, however, were taken up by the messengers, and gave plain indications not only of a treasonable correspondence with the enemy, but that he was connected with one Henry Lutterloh, Esq; a German, who then resided at Wickham near Portsmouth. This person being also apprehended, not only made a full discovery of the treasonable correspondence with France, but gave abundant proofs of himself being one of the most depraved and hardened of all mankind, lost to every sensation excepting the desire of accumulating wealth. His evidence, however, and other strong circumstances, were sufficient to convict M. de la Motte, who was accordingly executed, though the king remitted that dreadful part of his sentence of having his heart taken out alive, &c. During his trial, and on every other occasion, he behaved in such a manner as showed him to be an accomplished gentleman; and not only excited the compassion, but the admiration of every one who saw him.

During the whole course of the war, only one other person was detected in any act of treason; and he ap-

pears to have been actuated merely by mercenary motives, though La Motte and John the Painter probably acted from principle. This was one David Tyrie, a native of Edinburgh. Having been bred in the mercantile line, and engaged in a number of speculations with a view to gain money, in all of which he discovered considerable abilities, he at last engaged in the dangerous one of conveying intelligence to the French of the ships of war fitted out in Britain, the time of their sailing, &c. For this he was apprehended in February 1782. The discovery was made by means of one Mrs Askew, who passed for his wife, having delivered a bundle of papers in a hurry to a school-mistress, and desiring her not to show them to any body. Instead of this, however, she not only inspected them herself, but showed them to another, by whom they were sent to the secretary at war. By this, and another packet discovered by William James, who had been employed to carry it to France, Tyrie was convicted and executed in the month of August 1782. He behaved with great resolution, and at last showed rather an indecent levity and unconcern, by laughing at the place of execution. The sentence not only took place in the dreadful manner appointed by law, but the crowd behaved with the most shameful and unexampled barbarity. "Such (says the accounts of his execution) being the singular conduct of many who were near the body, that happy was he who could procure a finger, or some vestige of the criminal!"—This unhappy man, while in prison, had, with his companions, contrived a method of effecting their escape, by working through a brick-wall three feet thick, and covering the hole with a plank coloured like the bricks; but the scheme was discovered by the imprudence of Tyrie himself asking the keeper how thick the wall was.

On the whole, it appears, that notwithstanding the excessive altercation and virulence of parties, which even went to such a length as to produce duels between some members of parliament, neither the one nor the other entertained any designs against what they believed to be the true interest of the nation. The one seem to have regarded its honour too much, and been inclined to sacrifice even its existence to that favourite notion: the other perhaps regarded the national honour too little; as indeed no advantageous idea could have been formed of the spirit of a nation which could submit to grant its colonies independence without any struggle. The event, however, has shown, that the loss of the colonies, so far from being a disadvantage, have been the very reverse. The commerce of Britain, instead of being dependent on America, has arrived at a much greater height than ever, while the consequent increase of wealth may, it is hoped, in time enable the nation to free itself from that enormous debt, great part of which has been contracted, first in defending, and then attempting to conquer the colonies.

New-BRITAIN, a large country of North America, called also *Terra Labrador*, has Hudson's bay and strait, on the north and west; Canada and the river St. Lawrence, on the south; and the Atlantic ocean, on the east. It is subject to Great Britain, but yields only skins and furs. The following is the best description of this country that hath yet appeared. It was drawn

Britain.
699
David Tyrie, a Scotchman, apprehended, tried, and executed, for conveying intelligence to the French.

700
Barbarity of the crowd who attended his execution.

701
Present flourishing state of Great Britain.

697
La Motte, a Frenchman, apprehended for high treason.

698
He is executed.

Britain.
Phil. Trans.
Vol. LXIV.
p. 372.

up by the commander of the Otter sloop, and communicated to the royal society by the honourable Daines Barrington in 1774.

"There is no part of the British dominions so little known as the immense country of Labrador. So few have visited the northern parts of this vast country, that almost from the straits of Belleisle until you come to the entrance to Hudson's bay, for more than ten degrees of latitude, no chart which can give any tolerable idea of the coast hath been hitherto formed. The barrenness of the country explains why it has been so seldom frequented. Here avarice has but little to feed on.

"Perhaps, without an immoderate share of vanity, I may venture to presume, that, as far as I have been, which is to the latitude of 59. 10. the draught which I have been able to form is by much the best of any that has hitherto been made.

"Others have gone before me blest with abilities superior to mine, and to whom I hope to be thought equal only in assiduity. But I had advantages of which they were destitute: with a small vessel, and having an Indian with me, who knew every rock and shoal upon the coast, I was enabled to be accurate in my observations; and these are the reasons why I deem my own sketch preferable to all others.

"As this country is one of the most barren in the whole world, so its sea-coast is the most remarkable. Bordered by innumerable islands, and many of them being a considerable distance from the main land, a ship of burden would sail a great way along the coast without being able to form any notion of its true situation.

"Hence it is that all charts of it have been so extremely erroneous; and hence arose those opinions that some of the inlets extended a vast distance into the country, if not quite into the sea of Hudson's bay.

"Davis's inlet, which has been so much talked of, is not 20 leagues from the entrance of it to its extremity.

"The navigation here is extremely hazardous. Towards the land, the sea is covered with large bodies and broken pieces of ice; and the farther you go northward, the greater is the quantity you meet with.

"Some of those masses, which the seamen call *islands of ice*, are of a prodigious magnitude; and they are generally supposed to swim two-thirds under water. You will frequently see them more than 100 feet above the surface; and to ships in a storm, or in thick weather, nothing can be more terrible.

"Those prodigious pieces of ice come from the north, and are supposed to be formed by the freezing of cataracts upon the lands about East Greenland and the pole. As soon as the severity of the winter begins to abate, their immense weight breaks them from the shore, and they are driven to the southward. To the miserable inhabitants of Labrador, their appearance upon the coast serves as a token of the approach of summer.

"This vast tract of land is extremely barren, and altogether incapable of cultivation. The surface is every where uneven and covered with large stones, some of which are of amazing dimensions. There are few springs; yet throughout the country there are prodigious chains of lakes or ponds, which are produced by

the rains and the melting of the snow. These ponds abound in trout, but they are very small.

"There is no such thing as level land. It is a country formed of frightful mountains, and unfruitful valleys. The mountains are almost devoid of every sort of herbage. A blighted shrub and a little moss is sometimes to be seen upon them, but in general the bare rock is all you behold. The valleys are full of crooked low trees, such as the different pines, spruce, birch, and a species of cedar. Up some of the deep bays, and not far from the water, it is said, however, there are a few sticks of no inconsiderable size. In a word, the whole country is nothing more than a prodigious heap of barren rocks.

"The climate is extremely rigorous. There is but little appearance of summer before the middle of July; and in September the approach of winter is very evident. It has been remarked, that the winters within these few years have been less severe than they have been known heretofore. The cause of such an alteration it would be difficult to discover.

"All along the coast there are many rivers that empty themselves into the sea, yet there are but few of any consideration; and you must not imagine that the largest are any thing like what is generally understood by a river. Custom has taught us to give them this appellation; but the greatest part of them are nothing more than broad brooks or rivulets. As they are only drains from the ponds, in dry weather they are every where fordable; for, running upon a solid rock, they become broad without having a bed of any depth below the surface of the banks.

"The superficial appearance of this country is extremely unfavourable. What may be hidden in its bowels, we cannot pretend to suggest: probably it may produce some copper; the rocks in many places are impregnated with an ore of that resemblance. Something of a horny substance, which is extremely transparent, and which will scale out into a multitude of small sheets, is often found amidst the stones; there are both black and white of this sort, but the black is the most rare. It has been tried in fire, but seems to be noways affected by heat.

"The species of wood here are not very various: excepting a few shrubs which have as yet received no name from the Europeans, the principal produce of the country is the different sorts of spruce and pine. Of these, even in the more southern parts, there is not abundance; as you advance northwards they gradually diminish; and by the time you arrive at the 60th degree of latitude, the eye is not delighted with any sort of herbage. Here the wretched residents build their miserable habitations with the bones of whales. If ever they cheer their aching limbs with a fire, they gather a few sticks from the sea shore, which have probably been washed from Norway or Lapland. Here a vast quantity of snow remains upon the land throughout the year.

"Although the winter here is so excessively rigid, in summer the heat is sometimes disagreeable; and in that season the weather is very moderate, and remarkably serene. It is but seldom foggy, speaking comparatively, between this and Newfoundland; nor are you so frequently liable to those destructive gales of wind which visit many other parts of the globe.

"It

Britannicus
||
Britton.

"It is in general high land, and sometimes you meet with mountains of an astonishing height; you are also frequently presented with prospects that are really awful, and extremely romantic.

"The inhabitants of New Britain are called *Eskimaux*. See GREENLAND and HUDSON'S-Bay.

BRITANNICUS, son to the emperor Claudius by Messalina, was excluded from the empire after his father had married Agrippina; who put her son Nero on the throne, and caused Britannicus to be poisoned A. D. 55.

BRITANNICUS, an Italian, one of the best humanists of the 15th century, was born at Brescia. He published notes on Persius, Juvenal, Terence, Statius, and Ovid. He died in 1510.

BRITE, or BRIGHT, in husbandry. Wheat, barley, or any other grain, is said to *brite*, when it grows over ripe and shatters.

BRITTANY, or BRETAGNE, a considerable province of France, which is 150 miles in length and 112 in breadth. It is a peninsula, surrounded on all sides by the ocean except on the east, where it joins to Anjou, Maine, Normandy, and Poitou. It is divided into the upper and lower; and therein are large forests. It carries on a great trade, by reason of the many harbours on its coasts. It was united to the crown of France in 1532. Rennes is the capital town.

BRITTLENESS, that quality of bodies on account of which they are denominated *brittle*, or which subjects them to be easily broken by pressure or percussion.

Brittle bodies are extremely hard; a very small percussion exerts a force on them equivalent to the greatest pressure, and thus may easily break them. This effect is particularly remarkable in glass suddenly cooled, the brittleness of which is thereby much increased. Tin, though in itself tough, gives a brittleness to all the other metals when mixed therewith. The brittleness of glass has been said to arise from the heterogeneity of the parts whereof it is composed, as salt and sand can never bind sufficiently together: but this cannot be the case; for the pure calces of metals, or any other simple substances when vitrified, become brittle also. In timbers, brittleness seems to be connected with durability; the more brittle any sort of wood is, the more durable it is found. Thus oak is of very long duration; while beech and birch, as being tough, presently rot, and are of little service in building.

BRITTON (Thomas), the famous musical small-coal-man, was born at Higham Ferrers in Northamptonshire. He served his time in London, where he set up in a stable, next door to the little gate of St John of Jerusalem, on Clerkenwell-green, which he converted into a house. Here getting acquainted with Dr Garrenciers, his near neighbour, he became an excellent chemist, constructing a moveable laboratory which was much admired by all who saw it. His skill in music was noways inferior to that in chemistry, either in the theory or practice; he had for many years a well frequented musical club, meeting at his own little cell; and was as well respected as known by persons of the first quality; being, above all, a valuable man in his mo-

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ral character. In Ward's account of clubs, we are told, that "Britton's was first begun, or at least confirmed, by Sir Roger L'Estrange, a very musical gentleman; and that the attachment of Sir Roger and other ingenious gentlemen, lovers of the muses, to Britton, arose from the profound regard he had in general to all manner of literature. It is observable, that this meeting was the first of the kind, and the undoubted parent of some of the most celebrated concerts in London. Ward, who was his cotemporary, says, that at the first institution of it, his concert was performed in his own house, which is thus described. "On the ground floor was a repository for small coal: over that was the concert room, which was very long and narrow; and had a ceiling so low, that a tall man could but just stand upright in it. The stairs to this room were on the outside of the house, and could scarce be ascended without crawling. The house itself was very old and low built, and in every respect so mean as to be a fit habitation only for a very poor man." Notwithstanding all this mansion, despicable as it may seem, attracted to it as polite an audience as ever the opera did. At those concerts Dr Pepusch, Mr Handel, Mr Bannister, Mr Henry Needler, and other capital masters, were performers. At the first institution of this club, it is certain Britton would receive no gratuity whatever from his guests, and was offended when ever any was offered him. According to some, however, he departed from this; and the rules were, Britton found the instruments, the subscription was 10s. a-year, and they had coffee at a penny a dish. The singularity of his character, the course of his studies, and the collections he made, induced suspicions that Britton was not the man he seemed to be. Among other groundless conjectures, his musical assembly was thought by some to be only a cover for seditious meetings; by others, for magical purposes; and Britton himself was taken for an atheist, a presbyterian, a Jesuit, &c. The circumstances of this man's death are not less remarkable than those of his life. There lived at that time one Samuel Honeyman, a blacksmith by trade, who became very famous for a faculty which he possessed of speaking as if his voice proceeded from some distant part of the house where he stood: in short, he was one of those men called *Ventriloqui**, i. e. those that speak from their bellies. One Robe, an acquaintance of Britton's, was foolish enough to introduce this man, unknown, to Britton, for the sole purpose of terrifying him; and he succeeded in it. Honeyman, without moving his lips, or seeming to speak, announced, as from afar off, the death of Britton within a few hours, with an intimation that the only way to avert his doom was for him to fall on his knees immediately and say the Lord's prayer: the poor man did as he was bid, went home and took to his bed, and in a few days died, leaving his friend Mr Robe to enjoy the fruits of his mirth. This happened in September 1714. Britton left behind him a large collection of books, music, and musical instruments. Of the former Sir Hans Sloane was a considerable purchaser. His collection of music, mostly pricked by himself, and very neatly, sold for near L. 100. In the British Museum there is a painting of him taken from the life. A mezzotinto print was taken from this picture, for which Mr Hughes (author

Britton.

* See Ventriloquism.

Briva
||
Broach.

of the siege of Damascus, and a frequent performer at Britton's concerts) wrote the following lines:

Tho' mean thy rank, yet in thy humble cell
Did gentle peace and arts unpurchas'd dwell;
Well pleas'd, Apollo thither led his train,
And music warbled in her sweetest strain.
Cyllenius so, as fables tell, and Jove,
Came willing guests to poor Philemon's grove.
Let useless pomp behold, and blush to find
So low a station, such a lib'ral mind.

BRIVA ISARÆ (anc. geog.), a town of Gallia Belgica on the river Isara or Oyle; now *Pontoyse*.

BRIVATES (anc. geog.), a port of Gallia Celtica; now *Brest*, in Brittany.

BRIVES-LA-GALLARD, a town of France, in lower Limosin. It stands in a fruitful plain, opposite to an island formed by the river Coreze, over which there are two handsome bridges. E. Long. 1. 45. N. Lat. 45. 15.

BRIXELLUM (anc. geog.), a town of Gallia Cispadana; remarkable for being the place where Otho killed himself after the battle of Bedriacum: now *Bersello* or *Bresello*, in the territory of Rhegio.

BRIXEN (the bishopric of), is seated in Tirol, in Germany, near the frontiers of Friuli and Carinthia, towards the east. The bishop has a vote and seat in the diet of the empire, and furnishes his contingent when any tax is laid on Tirol. The principal places are Brixen, Sertzingen, Breuneck, and Lientz.

BRIXEN, the capital of the bishopric of the same name, and where the bishop commonly resides, is seated on the river Eisache, at some distance from the mountain Brenner. It is surrounded with mountains, where there are plenty of vineyards, which yield good red wine. It is a populous town; and the houses are well built with piazzas, and are painted on the outside. The public buildings are very handsome, and there are several spacious squares. It is much frequented, on account of the mineral waters that are near it. E. Long. 11. 50. N. Lat. 46. 35.

BRIXIA (anc. geog.), a town of the Cenomani in the Regio Transpadana: now *Brescia*, capital of the Bresciano.

BRIZA, QUAKING-GRASS, in botany: A genus of the digynia order, belonging to the triandria class of plants; and in the natural method ranking under the 4th order, *Gramina*. The calyx is two-valved, and multiflorous; the spicula bifarious or spread to the two sides; with the small valves heart-shaped and blunt, and the inner one small in proportion to the rest. There are five species of briza; two of which are natives of Britain, viz. the media or middle quaking-grass, and the minor or small quaking-grass. They grow in pasture grounds.

BRIZE, in husbandry, denotes ground that has lain long untilled.

BRIZE Vents, shelters used by gardeners who have not walls on the north-side, to keep cold winds from damaging their beds of melons. They are inclosures about six or seven feet high, and an inch or more thick; made of straw, supported by stakes fixed into the ground, and props across on both inside and outside; and fastened together with willow-twigs, or iron-wire.

BROACH, BROCHA (from the French *broche*, de-

notes an awl or bodkin; also a large packing-needle. Broadcast. A spit, in some parts of England, is called a *broach*; and from this word comes to pierce or broach a barrel. In Scotland, *broach*, *broche*, or *brôtche*, is the name of an utensil which the Highlanders use, like the *fibula* of the Romans, to fasten their vest. They are usually made of silver; of a round figure; with a tongue crossing its diameter, to fasten the folds of the garment; sometimes with two tongues, one on each side of a cross-bar in the middle. There are preserved, in several families, ancient broches of very elegant workmanship, and richly ornamented. Some of them are inscribed with names, to which particular virtues used to be attributed; others are furnished with receptacles for relics, supposed to preserve from harm. So that these broches seem to have been wore not only for use but as amulets. One or two of this sort are figured and described by Mr Pennant, *Tour in Scotl.* i. 90. iii. 14. edit. 3d.

BROADCAST, as opposed to the drill husbandry, denotes the method of cultivating corn, turnips, pulse, clover, the foreign grasses, and most other field plants, that are not transplanted by sowing them with the hand; in which method they are scattered over the ground at large, and thence said to be sown in broadcast. This is called the *old husbandry*, to distinguish it from the drill, horse-hoeing, or new husbandry. See AGRICULTURE.

BROAD-Piece, a denomination given to certain gold pieces broader than a guinea; particularly Caroluses and Jacobuses.

BROAD-Side, in the sea-language, a discharge of all the guns on one side of a ship at the same time. A broad-side is a kind of volley of cannonade, and ought never to be given at a distance from the enemy above musket-shot at point-blank.

BROCADE, or BROCADO, a stuff of gold, silver, or silk, raised and enriched with flowers, foliages, and other ornaments, according to the fancy of the merchants or manufacturers.

Formerly the word signified only a stuff, wove all of gold, both in the warp and in the woof, or all of silver, or of both mixed together; thence it passed to those of stuffs in which there was silk mixed, to raise and terminate the gold or silver flowers: but at present all stuffs, even those of silk alone, whether they be grograms of Tours or of Naples, sattins, and even taffeties or lutstrings, if they be but adorned and worked with some flowers or other figures, are called *brocades*.

In manufacturing brocades, the flatted gilt wire is spun on threads of yellow silk approaching as near as may be to the colour of gold itself. The wire, winding off from a bobbin, twists about the thread as it spins round; and, by means of curious machinery, too complex to be described here, a number of threads are thus twisted at once by the turning of one wheel. The principal art consists in so regulating the motion, that the several circumvolutions of the flatted wire on each side may just touch one another, and form, as it were, one continued covering. It is said, that at Milan there is made a sort of flatted wire gilt only on one side, which is wound upon the thread so that only the gilt side appears; and that the preparation of this wire is kept a secret, and has been attempted in other places with

Brocade. with little success. There is also a gilt copper wire, made in the same manner as the gilt silver: Savary observes, that this kind of wire, called *false gold*, is prepared chiefly at Nuremberg; and that the ordinances of France require it to be spun, for its distinction from the gilt silver, on flaxen or hempen threads. One of our writers takes notice, that the Chinese, instead of flattened gilt wire, use slips of gilt paper, which they both interweave in their stuffs and twist upon silk threads: this practice he inconsiderately proposes as a hint to the British weaver. But, whatever be the pretended beauty of stuffs of this kind of manufacture, it is obvious that they must want durability. The Chinese themselves, according to Du Halde's account, sensible of this imperfection, scarcely use them any otherwise than in tapestries, and such other ornaments as are not intended to be much worn, or exposed to moisture.

Lewis's Commerce of Arts. The Venetians have carried on a large trade to the Levant, in a kind of brocade called *domasquete*, which, though it has only about half the quantity of gold or silver as that made among us, looks far more beautiful. The flattened wire is neither wound close together on the silk threads, nor the threads stuck close in the weaving; yet by passing the stuff betwixt rolls, the disposition and management of which is kept a secret, the tissue or flower is made to appear one entire brilliant plate of gold or silver. The French ministry, ever vigilant for the advancement of arts and commerce, judged this manufacture important enough to deserve their attention; and accordingly, for contriving the machinery, they engaged the ingenious M. Vaucanson, known throughout Europe for his curious pieces of mechanism, who, in the memoirs of the academy for the year 1757, lately printed, gives an account of his success, and of the establishment of such a manufacture at Lyons.

The lower roll is made of wood, 32 inches in length and 14 in diameter; the upper one of copper, 36 inches long and 8 in diameter: this last is hollow, and open at one end, for introducing iron heaters. For making the rolls cylindrical, he has a particular kind of lathe, wherein the cutting tool, which the most dexterous hand could not guide in a straight line through such a length as 36 inches, is made to slide, by means of a screw, on two large steel rulers, perfectly straight, and capable of being moved at pleasure, nearer, and always exactly parallel, to the axis of the roll.

He first disposed the rolls nearly as in the common flattening mill. In this disposition, ten men were scarcely sufficient for turning them with force enough to duly extend the gilding; and the collars, in which the axes of the rolls turned at each end, wore or galled so fast, that the pressure continually diminished, insomuch that a piece of stuff of ten ells had the gilding sensibly less extended on the last part than on the first. He endeavoured to obviate this inconvenience by screwing the rolls closer and closer in proportion as the stuff passed thro', or as the wearing of the collars occasioned more play between them; but this method produced an imperfection in the stuff, every turn of the screw making a sensible bar across it. To lessen the attrition, each end of the axis, instead of a collar, was made to turn between three iron cylinders called *friction wheels*: but even this did not answer fully, for now another source of unequal

pressure was discovered. The wooden roll, being compressible, had its diameter sensibly diminished: it likewise lost its roundness, so that the pressure varied in different points of its revolution. On trying different kinds, both of European and Indian woods, all the hard ones split, the soft ones warped without splitting, and of more than 20 rolls, there was not one which continued round for 24 hours even without being worked in the machine.

These failures put him upon contriving another method of pressing the rolls together, so that the force should always accommodate itself to whatever inequalities might happen. The axis of the copper roll being made to turn between friction-wheels as before, that of the wooden one is pressed upwards by a lever at each end furnished with a half collar for receiving the end of the axis. Each lever has the end of its short arm supported on the frame of the machine, and the long arm is drawn upwards by an iron rod communicating with the end of the short arm of another lever placed horizontally: to the long arm of this lever is hung a weight, and the levers are so proportioned, that a weight of 30 pounds presses the rolls together with a force equivalent to 17,536 pounds, which was found to be the proper force for the sufficient extension of the gilding. By this contrivance four men can turn the rolls with more ease than ten can turn those which are kept together by screws; and the same weight acting uniformly in every part, the pressure continues always equal, though the wooden roll should even become oval, and though the stuff be of unequal thickness.

A piece of cloth, of about two ells, is sewed to the beginning and end of the stuff, to keep it out to its width when it enters and parts from the rolls, which could not be done by the hands for fear of burning or bruising them; as it would take too much time to sew these cloths to every small piece of an ell or two, a number of these is sewed together. The stuff is rolled upon a cylinder, which is placed behind the machine, and its axis pressed down by springs to keep the stuff tight as it comes off. Four iron bars, made red hot, are introduced into the copper roll, which in half an hour acquires the proper degree of heat, or nearly such a one as is used for the ironing of linen: the wooden roll is then laid in its place, and the machine set to work. If more than 30 ells are to be passed at once, the wooden roll must be changed for another, for it will not bear a long continuance of the heat without danger of splitting: and therefore the manufacturer should be provided with several of these rolls, that when one is removed, another may be ready to supply its room: as soon as taken off from the machine, it should be wrapt in a cloth and laid in a moist place.

The principal inconvenience attending the use of this machine, is, that the heat necessary for extending the gilding, though it improves the brightness of white and yellow silks, is injurious to some colours, as crimson and green. A double pressure will not supply the place of heat; and the only method of preventing this injury, or rendering it as light as possible, appeared to be, to pass the stuff through with great celerity.

Method of Cleaning Brocade when sullied. For this purpose neither alkalies nor soap must be used; because the former, while they clean the gold, corrode the silk,

Brocade and change or discharge its colour; and the latter also alters the shade, and even the species, of certain colours. But spirit of wine may be used without any danger of its injuring either the colour or quality of the subject; and in many cases proves as effectual for restoring the lustre of the gold as the most corrosive detergents. A rich brocade flowered with a variety of colours, after being disagreeably tarnished, had the lustre of the gold perfectly restored by washing it with a soft brush dipt in warm spirit of wine, and some of the colours of the silk which were likewise soiled became at the same time remarkably bright and lively. Spirit of wine seems to be the only material adapted to this intention, and probably the boasted secret of certain artists is no other than of this spirit disguised. Dr Lewis says he does not know of any other that is of sufficient activity to discharge the foul matter, without being hurtful to the silk. As to powders, however fine, and however cautiously used, they scratch and wear the gold, which here is only superficial, and of extreme tenuity.

Commerce of
Arts, p. 39.

BROCADE-Shell, the English name of a species of LIMAX.

BROCA TEL, or **BROCA DEL**, a kind of coarse brocade; chiefly used for tapestry.

BROCCOLI, a kind of cabbage cultivated for the use of the table. See BRASSICA.

BROCHE, or **BROACH**. See BROACH.

BKOCK, among sportsmen, a term used to denote a badger.—A hart, too, of the third year, is called a *brock*, or *brocket*; and a hind of the same year, is called a *brocket's sister*.

BROD, a town of Hungary, in the county of Possega in Sclavonia, seated on the river Save. It was once more considerable than at present; and is memorable for a victory obtained over the Turks in 1668. E. Long. 18. 36. N. Lat. 45. 20.

BRODEAU (John), in Latin *Brodeus*, a great critic, on whom Lypsius, Scaliger, Grotius, and all the learned, have bestowed great encomiums, was descended from a noble family in France, and born at Tours in 1500. He was liberally educated, and placed under Alciat to study the civil law; but soon forsaking that, he gave himself up wholly to languages and the belles lettres. He travelled into Italy, where he became acquainted with Sadolet, Bembus, and other famous wits; and here (says Thaunus) he applied himself to the study of mathematics, philosophy, and the sacred languages, in which he made no small proficiency. Then, returning to his own country, he led a retired, but not an idle, life, as his many learned lucubrations abundantly testify. He was a man free from all ambition and vain glory, and suffered his works to be published rather under the sanction and authority of others than under his own. His chief works are, 1. A commentary on the *Anthologia*. 2. Ten books of miscellanies. 3. Notes on Oppian, Euripides, &c. He died in 1563, aged 63.

BRODERA, or **BRODRA**, a town of Asia, in the empire of the Great Mogul. It stands in a large sandy plain, on the little river Wasset; and is fortified, after the old way, with pretty good walls and towers. It is inhabited by Banians and callico-weavers. The country about it produces plenty of gum-lac and indigo. E. Long. 72. 30. N. Lat. 22. 10.

BROGLING FOR BELLS; the same with SNIGGLING.

BROGLIO, a town of Piedmont in Italy, and capital of a county of the same name, situated near the frontiers of Provence, in E. Long. 6. 42. N. Lat. 44. 12.

BROKE (Sir Robert), lord chief justice of the common pleas, was the son of Thomas Broke, Esq; of Claverly in Shropshire, and educated at Oxford; from whence he removed to the middle temple, and soon became a very eminent lawyer. In the year 1542, he was chosen summer reader, and double reader in 1550. In 1552, he was made serjeant at law; and the year following (first of queen Mary), lord chief justice of the common pleas; about which time he received the honour of knighthood. Stow says he was recorder of London and speaker of the house of commons; which is confirmed by a manuscript in the Ashmolean library. He died and was buried at Claverly in Shropshire, the place of his nativity, in 1558. Wood gives him the character of a great lawyer and an upright judge. His works are, 1. An abridgement containing an abstract of the year-books till the time of queen Mary. 2. Certain cases adjudged in the reign of Henry VIII. Edward VI. and queen Mary. 3. Reading on the statute of limitations, 32 Hen. VIII. c. 2.

BROKEN WIND, among farriers. See FARRIERY.

BROKER. The origin of the word is contested; some derive it from the French *broier*, "to grind;" others from *brocarder*, "to cavil, or triggler;" others deduce broker from a trader broken, and that from the Saxon *broc*, "misfortune," which is often the true reason of a man's breaking. In which view, a broker is a broken trader by misfortune; and it is said none but such were formerly admitted to that employment.

BROKERS are of three kinds; exchange-brokers, stock-brokers, and pawn-brokers.

Exchange BROKERS, are a sort of negociators, who contrive, make, and conclude bargains between merchants and tradesmen, in matters of money or merchandise, for which they have a fee or premium. These, in old English law-books, are called *broggers*, and in Scotland, *broccarii*, i. e. according to Skene, mediators or intercessors in any contract, &c.

They make it their business to know the alteration of the course of exchange, to inform merchants how it goes, and to notify to those who have money to receive or pay beyond sea, who are proper persons for negotiating the exchange with; and when the matter is accomplished, that is, when the money is paid, they have for brokerage 2s. per 100l. sterling. These, by the statute 8 and 9 William III. are to be licensed in London by the lord mayor, who gives them an oath, and takes bond for the faithful execution of their offices. If any person shall act as broker without being thus licensed and admitted, he shall forfeit the sum of 500l.; and persons employing him, 5l.; and brokers are to register contracts, &c. under the like penalty: also brokers shall not deal for themselves, on pain of forfeiting 200l. They are to carry about with them a silver medal, having the king's arms and the arms of the city, and pay 40s. a-year to the chamber of the city.

In France, till the middle of the 17th century, their exchange-brokers were called *courtiers de change*; but by an arret of council in 1639, the name was changed for that more creditable one of *agent de change, banquier*.

Broglie
Broker.

Broker. *Of finance*; and in the beginning of the 18th century, to render the office still more honourable, the title of *king's counsellors* was added.

At Grand Cairo, and several places of the Levant, the Arabs, who do the office of exchange-brokers, are called *consuls*; the manner of whose negotiating with the European merchants has something in it so very particular, that we have referred it to a distinct article. See **CONSUL**.

The exchange brokers at Amsterdam, called *makel-ders*, are of two kinds; the one, like the English, called *sworn brokers*, because of the oath they take before the burgo-masters; but the others negotiate without any commission, and are called *walking brokers*. The first are in number 395; whereof 375 are Christians, and 20 Jews: the others are near double that number; so that in Amsterdam there are near 1000 exchange-brokers.—The difference between the two consists in this: The books and persons of the former are allowed as evidence in the courts of justice; whereas, in case of dispute, the latter are disowned, and their bargains disannulled.

The fee of the sworn exchange-brokers of Amsterdam is fixed by two regulations, of 1613 and 1623, with regard to matters of exchange, to 18 sols for 100 livres de gros, or 600 florins; i. e. three sols for 100 florins; payable, half by the drawer and half by the person who pays the money. But custom has made considerable alterations herein.

The Jews, Armenians, and Banians, are the chief brokers throughout most parts of the Levant and the Indies. In Persia, all affairs are transacted by a sort of brokers whom they call *delal*, i. e. great talkers. The manner of making their markets is very singular: after the brokers have lanced out into long, and usually impertinent discourses, coming towards a conclusion, they only converse with their fingers. The buyer and seller's broker each take the other by the right hand, which they cover with their coat or a handkerchief: the finger stretched out stands for six; bent for five; the tip of the finger for one; the whole hand for 100; and the hand clinched, for 1000. They will express even pounds, shillings, and pence, by their hands. During all this mystic commerce, the two brokers appear as cold and composed as if there were nothing passing between them.

The French distinguish two kinds of brokers; one for the service of merchants, the other of manufacturers, artificers, and workmen. The business of the former is to facilitate the sale of goods in the wholesale and mercantile way; that of the other, to procure the goods wanted for manufacturers, artificers, &c. or to sell their goods when made. At Paris there is scarce a company of tradesmen, or even mechanics, but have their brokers, who are usually taken out of their body, and make it their sole business to negotiate in the particular kinds of goods to which such company is by statutes restrained. There are brokers for drapery, brokers for grocery, brokers for mercery, &c. There are even brokers for tanners, curriers, cutlers, and the like.

Stock-BROKERS, are those who are employed to buy and sell shares in the joint stock of a company or corporation, and also in the public funds. As the practice of stock-jobbing has been carried to such an ex-

cess as became not only ruinous to a great number of private families, but even affected, or at least might soon affect, the public credit of the nation, the legislature thought fit to put a stop to it, or at least to bring it within certain bounds, and under some regulation. The negotiations, &c. of these brokers are regulated by stat. 6 Geo. I. cap. 18. and 7 and 10 Geo. II. cap. 8. which, among other things, enacted, that contracts in the nature of wagers, &c. incur a penalty of L. 500, and by the sale of stock, of which the seller is not possessed, a forfeit of L. 100, and that brokers keep a book, in which all contracts, with their dates, and the names of the parties concerned, shall be entered, on pain of L. 50.

Pawn-BROKERS, persons who keep shops, and lend money upon pledges to necessitous persons, and most commonly at an exorbitant interest. They are more properly styled *pawn takers*, or *tally-me*; sometimes *fripers*, or *friperers*. These are meant in 1 Jac. I. cap. xxi. sect. 5. where it is declared, that the sale of goods wrongfully taken to any broker, or pawn-broker, in London, Westminster, Southwark, or within two miles of London, does not alter the property. And (sect. 7.) if a broker, having received such goods, shall not, upon request of the owner, discover them, how and when he came by them, and to whom they are conveyed, he shall forfeit the double value thereof, to be recovered by action of debt, &c.

In the cities of Italy, there are companies established by authority for the letting out money on pawns, called *mounts of piety*; a title little becoming such institutions. In some parts of Italy, they have also mounts of piety of another kind, wherein they only receive ready money, and return it again with interest, at a certain sum *per annum*. At Bologna, they have several such mounts, which are distinguished into *frank* and *perpetual*: the interest of the former is only four *per cent.*; that of the latter, seven.

BROKERS are also those who sell old household furniture, and wearing apparel, &c.

BROME (Alexander), a poet and attorney in the lord mayor's court in the reign of Charles II. was the author of the greatest part of those songs and epigrams which were published in favour of the royalists, and against the *rump*, as well in Oliver Cromwell's time as during the rebellion. These, together with his Epistles and Epigrams translated from different authors, were all printed in one volume 8vo after the Restoration. He also published a version of Horace, by himself and others, which is very far from being a bad one. He left behind him a comedy intitled *The Cunning Lovers*; and the world is indebted to him for two volumes of Richard Brome's plays in octavo; many of which, but for his care in preserving and publishing them, would in all probability have been entirely lost. He died in 1666.

BROME (Richard), a dramatic writer who lived in the reign of King Charles I. and was cotemporary with Decker, Ford, Shirley, &c. His extraction was mean, he having been originally no better than a menial servant to the celebrated Ben Johnson. He wrote himself, however, into high reputation, as is testified not only by various commendatory verses written by his contemporaries and prefixed to many of his plays, but also by some lines which his quondam master addressed to him

Broker,
Brome.

Bromelia. on account of his comedy called *The Northern Lass*. Brome, in imitation of his master, laid it down as his first great point, to apply closely to the study of men and manners. His genius was entirely turned to comedy; and therefore his proper province was observation more than reading. His plots are all his own, and are far from being ill conducted; and his characters, which for the most part are strongly marked, were the offspring of his own judgment and experience, and his close attention to the foibles of the human heart. In a word, his plays in general are good ones; met with great applause when first acted; and as Langbain informs us, were thought by the players worthy to be revived, to their own profit and the author's honour, in that critical age which he himself lived in. Nay, we have had a proof, even in our own time, of the merit of one of his comedies, which with a very little alteration has lately been revived, and with great success, viz. *The Jovial Crew*, which for no less than three seasons running brought crowded audiences to the theatre-royal in Covent Garden at all the frequent repetitions of its performance. The comedies which the author left behind him are 15 in number; ten of which are collected together, as above mentioned, in two volumes octavo. He joined also with Thomas Heywood in a play called *The Lancashire Witches*.

BROMELIA, the PINE-APPLE: A genus of the monogynia order, belonging to the hexandria class of plants; and in the natural method ranking under the 10th order, *Coronaria*.

Species. Of this genus Linnæus enumerates seven species; but the following are the most remarkable. I. The ananas; of which there are six varieties, viz. 1. The ovatus, or oval-shaped pine-apple. 2. The pyramidalis, pyramidal, or sugar-loaf pine. 3. The glaber, with smooth leaves. 4. The lucidus, with shining green leaves. 5. The ferrotinus, with a yellowish coloured flesh. 6. The viridis, or green pine-apple. The other species are, II. The nudicaulis, with the lower leaves indented and prickly. III. The lingulata, with obtuse, sawed, and prickly leaves.—The first sort hath leaves very like some sorts of aloes, but not so thick and succulent, which are strongly armed with black spines. From the centre of the plant arises the flower-stalk, which is near three feet high, the lower part of which is garnished with entire leaves placed alternately at every joint. The upper part of the stalk is garnished with flowers set in a loose spike or thyrse quite round: these are succeeded by oval seed-vessels, having a longitudinal partition, in the centre of which are fastened smooth cylindrical seeds.—The second hath shorter leaves than the first, which are sharply sawed on their edges, and of a deep green colour. The flower-stem arises from the centre of the plant, which divides upward into several branches: the upper part of these are garnished with spikes of flowers, which come out alternately from the sides of the branches, each having a narrow entire leaf just below it, which are longer than the spike. The flowers are placed very close on the spikes: and when they decay, the empalement turns to an oval-pointed seed-vessel, inclosing seeds of the same shape with the other.

Culture, &c. The first sort of ananas is the most common in Europe; but the second sort is much pre-

ferable to it, the fruit of this being larger and much better flavoured: the juice of this sort is not so astringent as that of the first; so that this fruit may be eaten in greater quantity with less danger. This sort frequently produces suckers immediately under the fruit, whereby it may be increased much faster than the common sort; so that in a few years it may be the best common sort in Britain.—The third sort is preserved by some curious persons for the sake of variety; but the fruit is not worth any thing.—The sort with very smooth grass-green leaves was raised from seeds taken out of a rotten fruit which came from the West Indies to the late Henry Heathcote, Esq; from whom Mr Miller received one plant, which produced large fruit: this is what the people of America call the *king pine*.—The plants are propagated by planting the crowns which grow on the fruit, or the suckers which are produced either from the sides of the plants or under the fruit: both which are found to be equally good; although by some persons the crown is thought preferable to the suckers, as supposing it will produce fruit sooner than the suckers, which is certainly a mistake. The suckers and crowns must be laid to dry in a warm place for four or five days, or more (according to the moisture of the part which adhered to the old plant or fruit); for if they are immediately planted, they will rot. The certain rule of judging when they are fit to plant, is by observing if the bottom is healed over and become hard; for if the suckers are drawn off carefully from the old plants, they will have a hard skin over the lower part, so need not lie so long as the crowns of those whose bottoms are moist. But whenever a crown is taken from the fruit, or the suckers from old plants, they should be immediately divested of their bottom-leaves, so high as to allow depth for their planting; so that they may be thoroughly dry and healed in every part, lest when they receive heat and moisture they should perish, which often happens when this method is not observed. If these suckers or crowns are taken off late in the autumn, or during the winter, or early in the spring, they should be laid in a dry place in the stove for a fortnight or three weeks before they are planted; but in the summer season, they will be fit for planting in a week at farthest.

These should be planted in a rich good kitchen-garden mould, not too heavy so as to detain the moisture too long, nor over light and sandy; but where this is wanting, you should procure some fresh earth from a good pasture, which should be mixed with about a third part of rotten neats dung, or the dung of an old melon or cucumber bed which is well consumed. These should be mixed six or eight months before they are used, but if it be a year it will be the better; and should be often turned, that their parts may be the better united, as also the clods well broken. This earth should not be screened very fine; for if you only clear it of the great stones, it will be better for the plants than when it is made too fine. You should always avoid mixing any sand with the earth, unless it be extremely stiff, and then it will be necessary to have it mixed at least six months or a year before it is used; and it must be frequently turned, that the sand may be incorporated in the earth so as to divide its parts: but you should not put more than a sixth part

Bromelia. of sand; for too much sand is very injurious to these plants. In the summer season, these plants must be frequently watered; but you should not give them large quantities at a time: you must also be very careful that the moisture is not detained in the pots by the holes being stopped, for that will soon destroy the plants. If the season is warm, they should be watered twice a-week; but in a cool season, once a-week will be often enough: and during the summer season you should once a-week water them gently all over their leaves; which will wash the filth from off them, and thereby greatly promote the growth of the plants.

There are some persons who frequently shift these plants from pot to pot. But this is by no means to be practised by those who propose to have large well-flavoured fruit: for, unless the pots be filled with the roots, by the time the plants begin to show their fruit, they commonly produce small fruit, which have generally large crowns on them; therefore the plants will not require to be new potted oftener than twice in a season. The first time should be about the end of April, when the suckers and crowns of the former year's fruit (which remained all the winter in those pots in which they were first planted) should be shifted into larger pots; *i. e.* those which were in halfpenny or three-farthing pots, should be put into penny or at most three-half penny pots, according to the size of the plants; for you must be very careful not to over-pot them, nothing being more prejudicial to these plants. The second time for shifting of them is in the beginning of August; when you should shift those which are of a proper size for fruiting the following spring into two penny pots, which are full large enough for any of these plants. At each of these times of shifting the plants, the bark-bed should be stirred up, and some new bark added, to raise the bed up to the height it was at first made; and when the pots are plunged again into the bark-bed, the plants should be watered gently all over their leaves, to wash off the filth, and to settle the earth to the roots of the plants. If the bark-bed be well stirred, and a quantity of good fresh bark added to the bed, at this latter shifting, it will be of great service to the plants; for they may remain in the same tan until the beginning of November, or sometimes later, according to the mildness of the season, and will require but little fire before that time. During the winter, they will not require to be watered oftener than once a week, according as you find the earth in the pots to dry: nor should you give them too much at each time; for it is much better to give them a little water often, than to over-water them.

You must observe never to shift those plants which show their fruit into other pots; for if they are removed after the fruit appears, it will stop the growth, and thereby cause the fruit to be smaller, and retard its ripening, so that many times it will be October or November before the fruit is ripe: therefore you should be very careful to keep the plants in a vigorous growing state from the first appearance of the fruit, because upon this depends the goodness and the size of the fruit; for if they receive a check after this, the fruit is generally small and ill-tasted.—When you have cut off the fruit from the plant whose kind you are desirous to propagate, you should trim the leaves, and

plunge the pots again into a moderate hot-bed, observing to refresh them frequently with water, which will cause them to put out suckers in plenty; so that a person may be soon supplied with plants enough of any of the kinds, who will but observe to keep the plants in health.

The most dangerous thing that can happen to these plants is their being attacked by small white insects, which appear at first like a white mildew, but soon after have the appearance of lice: these attack both root and leaves at the same time; and if they are not soon destroyed, will spread over a whole stove in a short time, and in a few weeks entirely stop the growth of the plants by sucking out the nutritious juice, so that the leaves will appear yellow and sickly, and have generally a great number of yellow transparent spots all over them. These insects, after they are fully grown, appear like bugs, adhering so closely to the leaves as not to be easily washed off, and seem to have no local motion. They were originally brought from America upon the plants which were imported from thence; and are probably the same insects which have destroyed the sugar-canes of late in some of the Leeward Islands, for upon some sugar-canes which were sent Mr Miller from Barbadoes he observed great numbers of these insects. Since they have been in England, they have spread greatly in such stoves where there has not been more than ordinary care taken to destroy them. They have also attacked the orange-trees in many gardens near London, and have done them incredible damage; but they do not endure the cold of our climate in winter, so that they are never found on such plants as live in the open air. The only method yet discovered for destroying these insects, is by frequently washing the leaves, branches, and stems, of such plants as they attack, with water in which there has been a strong infusion of tobacco stalks. But this method cannot be practised on the ananas plants, because the insects will fasten themselves so low between the leaves, that it is impossible to come at them with a sponge to wash them off; so that if all those which appear to sight are cleared off, they will soon be succeeded by a fresh supply from below, and the roots will be also equally infested at the same time. Therefore, whenever these insects appear on the plants, the safest method will be to take the plants out of the pots, and clear the earth from the roots; then prepare a large tub, which should be filled with water in which there has been a strong infusion of tobacco stalks; into this tub you should put the plants, placing some sticks cross the tub to keep them immersed in water. In this water they should remain 24 hours; then take them out, and with a sponge wash off all the insects from the leaves and roots, and dip the plants into a tub of fair water, washing them therein, which is the most effectual way to clear them from the insects. After which, you should pot them in fresh earth; and, having stirred up the bark-bed, and added some new tan to give a fresh heat to the bed, the pots should be plunged again, observing to water them all over the leaves, and this should be repeated once a-week during the summer season; for these insects always multiply much faster where the plants are kept dry, than where they are sometimes sprinkled over with water, and kept in a growing state. As these insects are frequently brought

over

Bromelia.

Bromelia. over from America on the ananas plants which come from thence, those persons who procure their plants from thence, should look carefully over them when they receive them, to see they have none of these insects on them; for if they have, they will soon be propagated over all the plants in the stove where they are placed; therefore, whenever they are observed, the plants should be soaked (as before directed) before they are planted into pots.

Such are the directions generally given with regard to the culture of the pine-apple in this country. Of late, however, some very considerable improvements have been made in that article. The leaves of the oak have been substituted to the more expensive bark; and by treating the pines with them, they are found to thrive as well, and to produce as good fruit, as in the other method: of the proper way of managing these leaves for the rearing of exotic plants, an account is given under the article *OAK-LEAVES*. But the most considerable improvement is that mentioned in the 67th volume of the Philosophical Transactions, where a method is shown by William Bastard, Esq; of Devonshire, of raising these fruits in water. His account of this method is as follows.

"Before I enter into the particulars of raising pine-apples in water, it will be necessary to tell you that my hot-house is covered with the best crown-glass, which I apprehend gives more heat than the common sort of green glass generally used for hot-houses. In the front part of the house, and indeed any where in the lowest parts of it, the pine-apple plants will not thrive well in water. The way in which I treat them is as follows. I place a shelf near the highest part of the back wall, so that the pine-plants may stand without absolutely touching the glass, but as near it as can be: on this shelf I place pans full of water, about seven or eight inches deep; and in these pans I put the pine-apple plants, growing in the same pots of earth as they are generally planted in to be plunged into the bark-bed in the common way; that is, I put the pot of earth, with the pine-plant in it, in the pan-full of water, and as the water decreases I constantly fill up the pan. I place either plants in fruit, or young plants as soon as they are well rooted, in these pans of water, and find they thrive equally well: the fruit reared this way is always much larger, as well as better flavoured, than when ripened in the bark-bed. I have more than once put only the plants themselves without any earth, I mean after they had roots, into these pans of water, with only water sufficient to keep the roots always covered, and found them flourish beyond expectation. In my house, the shelf I mention is supported by irons from the top, and there is an intervening space of about 10 inches between the back wall and the shelf. A neighbour of mine has placed a leaden cistern upon the top of the back flue (in which, as it is in contact with the flue, the water is always warm when there is fire in the house), and finds his fruit excellent and large. My shelf does not touch the back flue, but is about a foot above it; and consequently the water is only warmed by the air in the house. Both these methods do well. The way I account for this success is, that the warm air always ascending to the part where this shelf is placed, as being the highest part of the house, keeps it much hot-

ter than in any other part. The temperature at that place is, I believe, seldom less than what is indicated by the 73d degree of Fahrenheit's thermometer, and when the sun shines it is often at above 100: the water the plants grow in seems to enable them to bear the greatest heat, if sufficient air be allowed; and I often see the roots of the plants growing out of the holes in the bottom of the pot of earth, and shooting vigorously in the water.

"My hot-house (the dimensions of which it may be proper to know) is 60 feet long and 11 feet wide, the flues included; six feet high in the front, and 11 feet at the back of the inside of the house. It is warmed by two fires. A leaden trough or cistern on the top of the back flue is preferable to my shelf, as in it the pine-plants grow much faster in the winter, the water being always warmed by the flue: of this I have seen the great benefit these last two months in my neighbourhood. It is not foreign to this purpose to mention, that, as a person was moving a large pine-plant from the hot-bed in my house last summer, which plant was just showing fruit, by some accident he broke off the plant just above the earth in which it grew, and there was no root whatever left to it: by way of experiment I took the plant, and fixed it upright in a pan of water (without any earth whatever) on the shelf; it there soon threw out roots, and bore a pine-apple that weighed upwards of two pounds."

BROMLEY, a town of Kent in England, situated on the river Ravensburn, in E. Long. 0. 5. N. Lat. 51. 23.

BROMSGROVE, a town of Worcestershire in England, seated on the river Salwarp. It is a pretty good town, well inhabited by clothiers; and the market is large for corn, cattle, and all sorts of provisions. W. Long. 2. 5. N. Lat. 52. 26.

BROMUS, **BROOM-GRASS**, in botany: A genus of the digynia order, belonging to the triandria class of plants; and, in the natural method, ranking under the 4th order, *Gramina*. The calyx is bivalved, having a partial spike, oblong and round, opposite grains, with an awn below the point of each outer valve. There are 24 species, eight of which are natives of Britain, viz. the *secalinus* or field broom-grass; the *arvensis*, or common broom-grass; the *ciliatus*, or wall broom-grass; the *sterilis*, or barren broom-grass; the *giganteus*, or tall broom-grass; the *ramosus*, or wood broom-grass; and the *pinnatus*, or spiked broom-grass.

BROMYARD, a town of Herefordshire in England, seated on a rising ground, and containing about 200 houses. W. Long. 2. 46. N. Lat. 52. 20.

BRON, a town of Italy, in the duchy of Milan, where the Imperialists gained an advantage over the French in 1703. E. Long. 10. 0. N. Lat. 44. 50.

BRONCHIA, in anatomy, the ramifications of the trachea. See *ANATOMY*, n^o 116.

BRONCHOCELE, a tumor rising in the anterior part of the neck. See *MEDICINE-Index*.

BRONCHOTOMY, in surgery, an incision made in the aspera arteria, or wind-pipe, which is necessary in many cases, and especially in a violent quinsy, to prevent suffocation from the great inflammation or tumor of the parts. It is also called *laryngotomy* and *tracheotomy*. See *SURGERY*.

BRONK-

Bromley
||
Broncho-
tomy.

Bronkhorst

||
Bronze.

BRONKHORST (John Van), an eminent painter who flourished about the middle of the last century. He was born at Utrecht; and after having studied under several masters, entered the school of Cornelius Poelemburg, whose style of painting he imitated with great success. He painted both history and landscapes; and his pictures, which are very highly finished, are held in great estimation. He amused himself with the point; and some landscapes from Poelemburg, together with other subjects from his own compositions, are attributed to him.

BRONTIÆ, or **THUNDER-STONES**, in natural history. See **BELEMNITES**.

BRONTIUM, in Grecian antiquity, a place underneath the floor of the theatres, in which were kept brazen vessels full of stones and other materials, with which they imitated the noise of thunder.

BRONTOLOGY, denotes the doctrine of thunder, or an explanation of its causes, phenomena, &c. together with the presages drawn from it. See **ELECTRICITY** and **THUNDER**.

BRONZE, a compound of copper and tin, to which sometimes other metallic substances, particularly zinc, are added.—This metal is brittle, hard, and sonorous. It is employed for various uses, as for making of bells, cannons, and statues; and the proportions of the component metals are varied to suit the several purposes to which it is applied. This compound, like some others, is specifically heavier than either of the metals taken separately. A metallic mass, composed of four-fifths of copper and one-fifth part of tin, weighs in water $7\frac{1}{8}$ grains more than the same quantities of these two metals would together weigh in water if not alloyed. This proves, that in the union of copper and tin there is a penetration of parts, the one metal entering into the pores of the other; and this is further confirmed by an observation of Mr Tillet, member of the royal academy of sciences. In his memoir concerning the ductility of metals, he takes notice, that when the mixture of copper and tin is made in the proportions above mentioned, the colour of the copper is entirely annulled and covered by that of the tin, although the quantity of the first be four times greater; and this singular effect cannot be understood without admitting a total change in the size and disposition of the pores of the compound metal.

Tin being less subject to rust than copper, bronze is also found to be less liable to be covered with verdigrise than pure copper is; and this is one reason why it is used for cannons, statues, and works exposed to the air and weather. The greater fusibility of bronze than copper is also an advantageous property, and much facilitates the casting of large works. The operation for casting bronze is sufficiently simple. For this purpose a brick furnace is used, nearly of the shape of an oven for baking bread. The floor of this furnace is concave, and consists of a composition of sand and clay. In this hollow floor the metals to be fused are put.—The furnace has three openings. The first is a lateral mouth, at which enters the flame of the wood placed in a second furnace, on one side of the first: the second opening is a chimney placed on a side opposite to the mouth, by means of which the flame is drawn over the metal. The third is a hole which is opened and shut at

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pleasure; through which the inner part of the furnace may be occasionally inspected, that the state of the metal may be observed. When the metal is in the state required, a fourth opening is then unclosed, communicating with the hollow floor, and thro' which the melted metal flows by channels into the moulds prepared to receive it.

BRONZE, also denotes a colour prepared by the colourmen of Paris, wherewith to imitate bronze.—There are two sorts, the red bronze and the yellow or golden. The latter is made solely of copper-dust, the finest and brightest that can be got; the former is made of the same, with the addition of a little quantity of red ochre well pulverized. They are both applied with varnish. To prevent their turning greenish, the work must be dried over a chafing-dish as soon as bronzed.

BRONZES, a name given by antiquarians to figures either of men or beasts, to urns, and in general to every piece of sculpture which the ancients made of that metal. We likewise give the name of *bronzes* to statues or busts cast of bronze, whether these pieces be copies of antiques or original subjects.—Among medallists, all copper medals bear the name of *bronze*.

BRONZING, the art or act of imitating bronze, which is done by means of copper-dust or leaf, fastened on the outside, as gold leaves are in gilding.

BROOD, the young of fish, fowls, &c.

BROODING, the act of a hen in hatching her eggs. See **HATCHING**.

BROOK, a little river or small current of water.—A brook is distinguished from a river, inasmuch as a river flows at all times, whereas a brook flows at some particular seasons only.

Brook-Lime. See **VERONICA**.

BROOKE (Mrs), daughter of a clergyman of the name of More, was a lady as remarkable for her virtues and suavity of manners, as for her great literary accomplishments. Her first performance, which introduced her to the notice and consequent esteem of the public, was *Julia Mandeville*; a work concerning which there were various opinions, but which every body read with eagerness. It has often been wished that she had made the catastrophe less melancholy; and we believe that she afterwards was of the same opinion, but she thought it beneath her character to alter it. She soon afterwards went to Canada with her husband, who was chaplain to the garrison at Quebec; and here she saw and loved those romantic characters and scenes which gave birth to *Emily Montague*, a work most deservedly in universal esteem, which has passed through several editions, and which is now not easily met with. On her return to England, accident introduced her, and congenial sentiments attracted her, to Mrs Yates; an intimacy was formed, which terminated only with the life of that lady. Mrs Brooke, in consequence of this connection, formed an acquaintance with Mr Garrick, and wrote some pieces for the stage. She had, however, great reason to be dissatisfied with his behaviour as a manager; and she made *The Excursion*, a novel which she wrote at this time, the vehicle by which she exhibited to the public her complaints and anger against the king of Drury. Her anger, we believe, was just, but the retribution was too severe. She herself af-

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terwards thought so, for she lamented and retracted it. Her first dramatic performance was the tragedy of *Virginia*, 1756. Her next effort in that line was *The Siege of Synope*, a tragedy introduced by Mr Harris, and written principally with a view of placing Mr Yates in a conspicuous character. This did not altogether fail, but it did not become popular; it wanted energy, and it had not much originality; there was little to disapprove, but there was nothing to admire. Her next and most popular production was *Rosina*, which, in a most liberal manner, she presented to Mr Harris. Few modern pieces have been equally successful. Last year also, a musical piece of hers, entitled *Marian*, was introduced, which is now occasionally exhibited, for which we believe Shield is principally to be thanked. Mrs Brooke was also the translator of various books from the French. She was esteemed by Dr Johnson, valued by Miss Seward, and her company courted by all the first characters of her time. She died in January 1789, two days after her husband. Her husband enjoyed the rectory of Colney in Norfolk, to which he had been preferred after his arrival from America.

BROOM, in botany. See GENISTA.

Butcher's-BROOM, in botany. See RUSCUS.

Spanish-BROOM, in botany. See SPARTIUM.

BROOM also denotes a well known household besom or implement wherewith to sweep away dirt, dust, and the like. We say, a *birch broom*, a *hair broom*, a *rush-broom*, a *heath-broom*. The primitive kind of brooms, from whence the denomination is given to all the rest, was made of the genista or wild broom growing on commons.

BROOM-flower gives the denomination to an order of knights instituted by St Lewis of France, on occasion of his marriage. The motto was *Exaltat humiles*, and the collar of the order made up of broom-flowers and husks, enamelled and intermixed with *fleur-de-lys* of gold, set in open lozenges, enamelled white, chained together, and at it hung a cross florence of gold. This answers to what the French call *Ordre de la Genesle*, from the name of a species of broom so called; different from the common broom, as being lower, the stalk smaller, and leaf narrow; the flower is yellow, and bears a long husk. Some also speak of another order of the *Genesle* or *Broom* established by Charles Martel, or rather Charles VI.

BROOM-gall, in natural history, a name given by authors to a remarkable species of galls found on the *genista vulgaris* or common broom. This is occasioned, like all other galls, by the puncture and eating of an insect, and, when opened, is found to contain a small oblong worm, of a red colour, but whose size requires the use of a glass in order to see it distinctly.

BROOM-Rape, in botany. See OROBANCHE.

BROOME (William), the coadjutor of Pope in translating the *Odyssey*, was born in Cheshire, as is said of very mean parents. He was educated upon the foundation at Eaton, and was captain of the school a whole year, without any vacancy, by which he might have obtained a scholarship at King's college. Being by this delay, such as is said to have happened very rarely, superannuated, he was sent to St John's college by the contribution of his friends, where he ob-

tained a small exhibition. At this college he lived for some time in the same chamber with the well known Ford, by whom Dr Johnson heard him described as a contracted scholar, and a mere versifier, unacquainted with life, and unskilful in conversation. His addiction to metre was then such, that his companions familiarly called him *Poet*. When he had opportunities of mingling with mankind, he cleared himself, as Ford likewise owned, from great part of his scholastic rust. He appeared early in the world as a translator of the *Iliad* into prose, in conjunction with Ozell and Oldisworth. How their several parts were distributed is not known. This is the translation of which Ozell boasted as superior, in Toland's opinion, to that of Pope: It has long since vanished (Dr Johnson observes), and is now in danger from the critics. He was introduced to Mr Pope, who was then visiting Sir John Cotton at Madingley, near Cambridge; and gained so much of his esteem, that he was employed to make extracts from Eustathius, for the notes to the translation of the *Illiad*; and in the volumes of poetry published by Lintot, commonly called *Pope's Miscellanies*, many of his early pieces were inserted.

Pope and Broome were to be yet more closely connected. When the success of the *Iliad* gave encouragement to a version of the *Odyssey*, Pope, weary of the toil, called Fenton and Broome to his assistance; and taking only half the work upon himself, divided the other half between his partners, giving four books to Fenton and eight to Broome. Fenton's books are enumerated in Dr Johnson's life of him. To the lot of Broome fell the second, sixth, eighth, eleventh, twelfth, sixteenth, eighteenth, and twenty-third, together with the burden of writing all the notes. The price at which Pope purchased this assistance was three hundred pounds paid to Fenton and five hundred to Broome, with as many copies as he wanted for his friends, which amounted to one hundred more. The payment made to Fenton is known only by hearsay; Broome's is very distinctly told by Pope in the notes to the *Dunciad*. It is evident, that, according to Pope's own estimate, Broome was unkindly treated. If four books could merit three hundred pounds, eight and all the notes, equivalent at least to four, had certainly a right to more than six. Broome probably considered himself as injured, and there was for some time more than coldness between him and his employer. He always spoke of Pope as too much a lover of money, and Pope pursued him with avowed hostility; for he not only named him disrespectfully in the *Dunciad*, but quoted him more than once in the *Bathos*, as a proficient in the art of sinking; and in his enumeration of the different kinds of poets distinguished for the profound, he reckons Broome among "the parrots who repeat another's words in such an hoarse odd tone as makes them seem their own." It has been said that they were afterwards reconciled; but their peace was probably without friendship. He afterwards published a *Miscellany of Poems*, and never rose to very high dignity in the church. He was some time rector of Sturston in Suffolk, where he married a wealthy widow; and afterwards, when the king visited Cambridge 1728, became doctor of laws. He was 1733 presented by the crown to the rectory of Pulham in Norfolk, which

Broome.

Brooming which he held with Oakley Magna in Suffolk, given him by the lord Cornwallis, to whom he was chaplain, and who added the vicarage of Eye in Suffolk; he then resigned Pulham, and retained the other two. Towards the close of his life he grew again poetical, and amused himself with translating Odes of Anacreon, which he published in the Gentleman's Magazine under the name of *Chester*. He died at Bath in 1745, and was buried in the abbey church.

BROOMING, or *BREWMING* of a Ship, the washing and burning off all the filth she has contracted on her sides with weeds, straw, broom, or the like, when she is on the careen, or on the ground. See **CAREENING**.

BROSSARD (Sebastian de), an eminent French musician. In the former part of his life he had been prebendary and chapel master of the cathedral church of Strasburg; but afterwards became grand-chaplain, and also maitre de chapelle in the cathedral of Meaux. There is extant of his a work entitled *Prodromus musicalis*. He was author also of a very useful book entitled *Dictionnaire de musique*, printed at Amsterdam, in folio, 1703; and afterwards at the same place in octavo, without a date. At the end of this book is a catalogue of authors ancient and modern, to the amount of 900, who have written on music; divided into classes, wherein are interspersed many curious observations of the author relating to the history of music. By Mr Boivin's *Catalogue general des livres de musique* for the year 1729, it appears that Brossard was the author of two sets of motets, as also of nine *Lecons de Tenebres* therein mentioned. It seems that these several publications were at a time when the author was far advanced in years; for Walther takes notice, that in the *Mercur Galante*, he is mentioned as an abbé and componist so early as the year 1678.

BROTHEL HOUSES, lewd places, being the common habitations of prostitutes. King Henry VIII. by proclamation, in the 37th year of his reign, suppressed all the stews or brothel-houses which had long continued on the bank-side in Southwark, contrary to the law of God and of the land *. A brothelman was a loose idle fellow; and a *feme bordelier*, or *brothelier*, a common whore. And *borelman* is a contraction for *brothelman*. See **Bawdy-House**.

BROTHER, *Frater*, a term of relation between two male children, sprung from the same father, or mother, or both. Scaliger and Vossius derive *frater* from *φρατηρ*, for *φρατωρ*, which properly signifies a person who draws water in the same well; *φραωρ*, in Greek, signifying *well*, and *φρατρια*, a company of people, who have a right to draw water out of the same well.—The word, it is said, came originally from the city Argos, where there were only a few wells distributed in certain quarters of the city, to which those of the same neighbourhood alone repaired.

By the civil law, brothers and sisters stand in the second degree of consanguinity; by the canon law, they are in the first degree.—By the Mosaic law, the brother of a man who died without issue was obliged to marry the widow of the deceased. Deuter. xxv. 7.

The ancients applied the term brother indifferently to almost all who stood related in the collateral line, as uncles and nephews, cousin-germans, &c.—This we learn not only from a great many passages in the Old

Testament, but also from profane authors: Cicero, in his *Philippics*, says, "Antonia was both wife and sister of Mark Anthony; because she was daughter of his brother C. Antonius." And as to cousins, Tullius Hostilius, in Dionysius Halicarnassensis, calls the Horatii and Curiatii, brothers; because they were sisters children.

The language of the Jews, bishop Pearson observes, included in the name of brethren not only the strict relation of fraternity, but also the larger of consanguinity. We are brethren, says Abraham to Lot, Gen. xiii. 8. whereas Lot was only his nephew.—So Jacob told Rachel that he was her father's brother, Gen. xxix. 12. whereas he was only her father's nephew.—This consideration has been urged with good advantage against the Antidicomarianites, who, from the mention made of the brethren of Jesus, John ii. 12. Matth. xii. 46. have impugned the perpetual virginity of the mother of Christ.

Among us, it is customary for kings to give the title brother to each other; the unction in coronation being esteemed to create a kind of brotherhood. Nor is the custom modern: Menander mentions a letter of Cosroes king of Persia to the emperor Justinian, beginning thus: Cosroes, king of kings, &c. to the emperor Justinian my brother.—Kings now also give the same appellation to the electors of the empire; and the like was given by the king of France to the late king of Sardinia, while only duke of Savoy.

In the civil law, brothers, *fratres*, in the plural, sometimes comprehend sisters: as *Lucius & Titia, fratres; tres fratres, Titius, Mævius, & Scia*.

Foster-BROTHERS, those who sucked the same nurse. The French call them *fratres du lait*, or brothers by milk; which is most properly used in respect of a person who sucked a nurse at the same time with the nurse's own child.

BROTHERS-German, *Fratres Germani*. See **GERMAN**.

BROTHER was also used, in middle-age writers, for a *comes*, or governor of a province.

BROTHER is applied, in a less proper sense, to denote a person of the same profession. In which sense, judges, bishops, priests, &c. call each other brothers.

BROTHER is also a customary term for priests of the same persuasion to address one another by: but it is more particularly used to denote the relation between monks of the same convent; as, brother Zachary: in English, we more usually say, Friar Zachary, from the French word, *frere*, brother.—Preachers also call their hearers, *my brethren*, or *my dear brethren*. This appellation is borrowed from the primitive Christians, who all called each other *brothers*. But it is now principally used for such of the religious as are not priests; those in orders are generally honoured with the title of *father*, whereas the rest are only simply brothers.

BROTHER is also an appellation more peculiarly given to certain orders of religious: Thus, the

BROTHERS of St Elexis, in the low countries, were an order of persons who attended on those who lay dying, and took care of the burial of the dead. See also **Brethren of CHARITY, of DEATH, &c.**

POOR BROTHERS, in the charity-house, a denomination given to decayed gentlemen, to the number of 80, who are subsisted with diet, clothing, and lodging, on the establishment. The poor brothers are to be gen-

Brother tlemen by descent, come to poverty, or decayed merchants, soldiers, or officers of the king's household. **Broughton.** The conditions of admission are, that they have no estate for life worth 200 l. nor coming in, *viis & modis*, 24 l. *per annum*; and that they be fifty years old, unless they have been maimed in the public service; in which case, the age of forty suffices. They wear a livery-gown within doors.

BROTHERS of Arms, an appellation given those who contract a kind of fraternity in war, obliging themselves to the mutual service and assistance of each other. In the military orders, the knights are also called *brothers*.—In the order of Malta, there is a particular class, who are called *-serving brothers*; consisting of such as cannot give proof of their nobility. In Latin they are denominated *fratres clientes*.

BROTHERS of the rosy cross. See ROSYCRUCIANS.

BROUAGE, a maritime town of Saintonge in France. It consists of five or six streets which terminate in a great square. It is famous for its salt-works, which are the finest in the kingdom. W. Long. 1. 0. N. Lat. 45. 50.

BROURSHAVEN, a port-town of the United Provinces, in the island of Schonen in Zealand, seated on the north side of the island, in a bay of the sea, in E. Long. 3. 35. N. Lat. 51. 50.

BROUGH, a town in Westmoreland in England, seated under Stanmore-hill, W. Long. 2. 50. N. Lat. 54. 40. It was formerly a place of great note, being a Roman fortress; but is now so much decayed, that it is little better than a village.

BROUGHTON (THOMAS), a learned divine, and one of the original writers of the *Biographia Britannica*, was born at London, July 5th 1704, in the parish of St Andrew, Holborn; of which parish his father was minister. At an early age he was sent to Eton school, where he soon distinguished himself by the acuteness of his genius, and the studiousness of his disposition. Being superannuated on this foundation, he removed about 1722 to the university of Cambridge; and, for the sake of a scholarship, entered himself of Gonville and Caius college. Here two of the principal objects of his attention were, the acquisition of the knowledge of the modern languages, and the study of the mathematics, under the famous professor Sanderfon. May 28th 1727, Mr Broughton, after taking the degree of Bachelor of Arts, was admitted to deacon's orders. In the succeeding year, September 22d, he was ordained priest, and proceeded to the degree of M. A. At this time he removed from the university to the curacy of Offley, in Hertfordshire. In 1739, he was instituted to the rectory of Stepington, otherwise Stibington, in the county of Huntingdon, on the presentation of John Duke of Bedford, and was appointed one of that nobleman's chaplains. Soon after he was chosen reader to the Temple, by which means he became known to bishop Sherlock, then master of it, and who conceived so high an opinion of our author's merit, that, in 1744, this eminent prelate presented Mr Broughton to the valuable vicarage of Bedminster, near Bristol, together with the chapels of St Mary Redcliff, St Thomas, and Abbot's Leigh, annexed. Some short time after, he was collated, by the same patron, to the prebend of Bedminster and Redcliff, in the cathedral of Salisbury.

Upon receiving this preferment, he removed from London to Bristol, where he married the daughter of Thomas Harris, clerk of that city, by whom he had seven children, six of whom survived him. He resided on his living till his death, which happened December 21st 1774, in the 71st year of his age. He was interred in the church of St Mary Redcliff.

From the time of Mr Broughton's quitting the university till he was considerably advanced in life, he was engaged in a variety of publications, of which a list is given in the *Biographia Britannica*, 2d edition. Some little time before his death, he composed "A short view of the principles upon which Christian churches require, of their respective clergy, subscription to established articles of religion;" but this work never appeared in print. He possessed, likewise, no inconsiderable talent for poetry, as is evident from many little fugitive pieces in manuscript, found among his papers; and particularly from two unfinished tragedies, both written at the age of 17. When he was at Eton school, Mr Broughton was of the same year with Dr Ewer, late bishop of Bangor; Dr Sumner, late provost of King's college, Cambridge; and Dr Sleech, late provost of Eton: and during his residence in London, he enjoyed the esteem and friendship of most of the literary men of his time. He was a great lover of music, particularly the ancient; which introduced him to the knowledge and acquaintance of Mr Handel; whom he furnished with the words for many of his compositions. In his public character, Mr Broughton was distinguished by an active zeal for the Christian cause, joined with a moderation of mind. In private life, he was devoted to the interests and happiness of his family; and was of a mild, cheerful, and liberal temper. This disposition, which is not always united with eminent literary abilities, attended him to his grave. In 1778, a posthumous "volume of sermons, on select subjects," was published by his son, the Rev. Thomas Broughton, M. A. of Wadham college, Oxford, and vicar of Tiverton, near Bath.

BROUKHUSIUS (JONUS), or JOAN BROEKHUIZEN, a distinguished scholar in Holland, was born November 20. 1649, at Amsterdam, where his father was a clerk in the admiralty. He learned the Latin tongue under Hadrian Junius, and made a prodigious progress in polite literature; but, his father dying when he was very young, he was taken from literary pursuits, and placed with an apothecary at Amsterdam, with whom he lived some years. Not liking this, he went into the army, where his behaviour raised him to the rank of lieutenant-captain; and, in 1674, was sent with his regiment to America in the fleet under admiral de Ruyter, but returned to Holland the same year. In 1678, he was sent to the garrison at Utrecht, where he contracted a friendship with the celebrated Grævius; and here, though a person of an excellent temper, he had the misfortune to be so deeply engaged in a duel, that, according to the laws of Holland, his life was forfeited: but Grævius wrote immediately to Nicholas Heinsius, who obtained his pardon from the Stadtholder. Not long after, he became a captain of one of the companies then at Amsterdam; which post placed him in an easy situation, and gave him leisure to pursue his studies. His company being disbanded in 1697, a pension was granted him; upon which he retired

Brouncker retired to a country-house near Amsterdam, where he saw but little company, and spent his time among books. He died December 15th 1707.

Browallia.

As a classical editor, he is distinguished by his labours upon Tibullus and Propertius; the latter was published in 1702, the former in 1708. He was an excellent Latin poet himself: a volume of his poems was published at Utrecht, 1684, in 12mo; but a very noble edition of them was given by Van Hoogstraeten at Amsterdam, 1711, in 4to. His "Dutch poems" were also published at Amsterdam, 1712, in 8vo, by the same person, who prefixed his life, extracted from Peter Burman's funeral oration upon him. Broukhufius was also an editor of Sannazarius's and Palearius's Latin works. With regard to his Latin poems, the authors of the "Journal de Trevoux" have delivered themselves thus (and what they have said may be applied to the bulk of modern Latin poems): "His verses are written in good Latin enough; but they want fire. We find in them a great many passages borrowed from Tibullus and Propertius, but not their genius. The author was a poet by art, not by nature."

BROUNCKER, or **BROUNKER**, (William), lord viscount of Castle-Lyons, in Ireland, and the first president of the Royal Society, was the son of Sir William Brounker, knt. and born about the year 1620. He was distinguished by his knowledge of the mathematics, and by the considerable posts of honour and profit he enjoyed after the restoration; for he had at the same time the office of chancellor to the queen, and the keeping of her great seal, that of one of the commissioners of the navy, and master of St Catharine's hospital near the Tower of London. He wrote, 1. Experiments of the recoiling of guns. 2. An algebraical paper upon the squaring of the hyperbola; and several letters to Dr Usher, archbishop of Armagh. He died in 1684.

BROUWER (Adrian), a famous Dutch painter, born either at Oudenard or Haerlem, in 1608, of poor parentage. He became the disciple of Francis Hals, under whom he proved an inimitable artist. His subjects were taken from low life, always copied from nature; as droll conversations, drunken brawls, bores at cards, or surgeons dressing the wounded. Brouwer was apprehended at Antwerp as a spy; where being discovered by Rubens, he procured his liberty, took him home, clothed him, and endeavoured to acquaint the public with his merit; but the levity of his temper made him quit his benefactor: and he died not long after, in 1640, destroyed by a dissolute course of life.

BROW, or **EYE-BROW**, an hairy arch extended over the orbit of each eye. See **ANATOMY**, n° 142.

BROW-Post, among builders, denotes a beam which goes across a building.

BROW-Antler, among sportsmen, that branch of a deer's horn next the tail.

BROWALLIA; in botany: A genus of the angiospermia order, belonging to the didynamia class of plants, for which there is no English name.—Of this there are two species. The demissa, with a single flower upon each footstalk; and the elata, with one or many flowers on each footstalk. The seeds of the first were sent to Mr Miller from Panama. It usually grows

about two feet high, and spreads out into lateral branches on every side of the stalk, garnished with oval leaves which are entire, and have short footstalks. Towards the end of the branches, the flowers are produced singly upon pretty long footstalks arising from the wing of the leaf. These are of a light blue colour, sometimes inclining to a purple or red; and there are often three colours of flowers on the same plant. They plant flowers in July, August, and September; and the seeds are ripe in five or six weeks after. The second sort is a native of Peru: the stalk of this plant is twice the size of that of the first, and appears somewhat shrubby; the leaves upon the flower-branches are smooth: the footstalks have some with one flower, others with three, and others with five; which are of a deep violet colour. As both species of browallia are annual plants, they must be raised from seeds, which are to be sown on a hot-bed: but they may be transplanted in June, into the borders of the flower-garden; where, if the weather proves warm, they will flower and perfect seeds; but lest these should fail, there should be a plant or two kept in the stove to secure seeds.

BROWN (Robert), a schismatic divine, the founder of the brownists, a numerous sect of dissenters in the reign of queen Elizabeth. He was the son of Mr Anthony Brown of Tolthorp in Rutlandshire; whose father obtained the singular privilege of wearing his cap in the king's presence, by a charter of Henry VIII. Robert was educated at Cambridge, in Corpus Christi, or, according to Collier, in Bennet college, and was afterwards a schoolmaster in Southwark. About the year 1580, he began to promulgate his principles of dissent from the established church; and the following year preached at Norwich, where he soon accumulated a numerous congregation. He was violent in his abuse of the church of England; pretended to divine inspiration, and that he alone was the sure guide to heaven. This new sect daily increasing, Dr Freake bishop of Norwich, with other ecclesiastical commissioners, called our apostle before them. He was insolent to the court, and they committed him to the custody of the sheriff's officer: but he was released at the intercession of lord treasurer Burleigh, to whom it seems he was related. Brown now left the kingdom; and, with permission of the states, settled at Middleburg in Zealand; where he formed a church after his own plan, and preached without molestation; but here persecution, the *sine qua non* of fanaticism, was wanting. In 1585, we find him again in England: for in that year he was cited to appear before archbishop Whitgift; and seeming to comply with the established church, was, by lord Burleigh, sent home to his father: but, relapsing into his former obstinacy, his aged parent was obliged to turn him out of his house. He now wandered about for some time, and in the course of his mission endured great hardships. At last he fixed at Northampton; where, labouring with too much indiscretion to increase his sect, he was cited by the bishop of Peterborough, and, refusing to appear, was finally excommunicated for contempt. The solemnity of this censure, we are told, immediately effected his reformation. He moved for absolution, which he obtained, and from that time became a dutiful member of the church of England. This happened about the year 1590; and, in

Browallia,
Brown.

Brown.

in a short time after, Brown was preferred to a rectory in Northamptonshire, where he kept a curate to do his duty, and where he might probably have died in peace: but having some dispute with the constable of his parish, he proceeded to blows; and was afterwards so insolent to the justice, that he committed him to Northampton jail, where he died in 1630, aged 80. Thus ended the life of the famous Robert Brown; the greatest part of which was a series of opposition and persecution. He boasted on his death-bed, that he had been confined in no less than 32 different prisons. He wrote "A treatise of reformation without tarrying for any, and of the wickedness of those teachers which will not reform themselves and their charge, because they will tarry till the magistrate command and compel them, by me Robert Brown;" and two others, making together a thin quarro; published at Middleburg, 1582.

BROWN (Ulysses Maximilian), a celebrated general of the 18th century, was son of Ulysses, baron Brown and Camus, colonel of a regiment of cuirassiers in the emperor's service, and descended from one of the most ancient and noble families in Ireland. He was born at Basil in 1705; and having finished his first studies at Limeric in Ireland, was, in 1715, sent for into Hungary, by count George Brown, his uncle, member of the aulic council of war, and colonel of a regiment of infantry. He was present at the famous battle of Belgrade, in 1717. Next year he followed his uncle into Italy, who made him continue his studies, in the Clementine college, at Rome, till the year 1721, when he was sent to Prague in order to learn the civil law. At the end of the year 1723, he became captain in his uncle's regiment; and in 1725, lieutenant-colonel: in 1730, he went into Corsica with a battalion of his regiment; and contributed greatly to the taking of Callanfara, where he received a considerable wound in his thigh. In 1732, the emperor made him chamberlain: He was raised to the rank of colonel in 1734; and distinguished himself so much in the war of Italy, especially at the battles of Parma and Guastalla, and in burning in the presence of the French army the bridge which the marshal de Noailles had caused to be thrown over the Adige, that he was made general in 1736. The following year he favoured the retreat of the army, after the unhappy battle of Banjuluca in Bosnia, by an excellent manœuvre, and saved all the baggage. His admirable conduct upon this occasion was rewarded by his obtaining a second regiment of infantry, vacant by the death of count Francis de Wallis.

At his return to Vienna, in 1739, the emperor Charles VI. raised him to the rank of general-field-marshal-lieutenant, and made him counsellor in the aulic council of war. After the death of that prince, the king of Prussia entering Silesia, count Brown, with a small body of troops, disputed the country with him inch by inch. He signalized himself on several other occasions; and, in 1743, the queen of Hungary made him a privy-counsellor, at her coronation in Bohemia. He at length passed into Bavaria, where he commanded the van-guard of the Austrian army; seized Deckendorf, with a great quantity of baggage; and obliged the French to abandon the banks of the Danube, which the Austrian army passed in full security. The same

year, viz. in 1743 the queen of Hungary sent him to Worms, in quality of her plenipotentiary to the king of Britain; where he put the last hand to the treaty of alliance between the courts of Vienna, London, and Turin. In 1744, he followed prince Lobkowitz into Italy; took the city of Velettri, on the 4th of August, in spite of the superior numbers of the enemy; entered their camp, overthrew several regiments, and took many prisoners. The following year he was recalled into Bavaria, where he took the town of Willshofen by assault, and received a dangerous shot in the thigh. The same year he was made general of the artillery; and in January 1746, marched for Italy at the head of a body of 18,000 men. He then drove the Spaniards out of the Milanese; and having joined the forces under prince de Lichtenstein, commanded the left wing of the Austrian army at the battle of Placentia on the 15th of June 1746, and defeated the right wing of the enemy's forces commanded by marshal de Maillebois. After this victory, he commanded in chief the army against the Genoese: seized the pass of Bosetta or Bochetta, though defended by above 4000 men; and took the city of Genoa. Count Brown at length joined the king of Sardinia's troops; and took, in conjunction with him, Mont-Alban, and the county of Nice. On the 30th of November he passed the Var, in spite of the French troops; entered Provence; took the isles of St Margaret and St Honorat; and thought to have rendered himself master of a much greater part of Provence, when the revolution which happened in Genoa, and marshal de Belleisle's advancing with his army, obliged him to make that fine retreat which procured him the admiration and esteem of all persons skilled in war. He employed the rest of the year 1747 in defending the states of the house of Austria in Italy; and after the peace of 1748, he was sent to Nice to regulate there, in conjunction with the duke of Belleisle and the marquis de la Minas, the differences that had arisen with respect to the execution of some of the articles of the definitive treaty of Aix la Chapelle.

The empress queen, to reward these signal services, especially his glorious campaigns in Italy in 1749, made him governor of Transylvania, where he rendered himself generally admired for his probity and disinterestedness. In 1752, he obtained the government of the city of Prague, with the chief command of the troops in that kingdom; in 1753, the king of Poland, elector of Saxony, honoured him with the collar of the order of the white eagle; and the next year he was declared field-marshal.

The king of Prussia entering Saxony in 1756, and attacking Bohemia, count Brown marched against him; and repulsed that prince at the battle of Lobositz, on the 1st of October, though he had only 27,000 men, and the king of Prussia had at least 40,000. Seven days after this battle, he undertook the famous march into Saxony, to deliver the Saxon troops shut up between Pirna and Konigstein; an action worthy of the greatest captains, ancient or modern. He at length obliged the Prussians to retire from Bohemia; for which he was rewarded, by being made a knight of the golden fleece. Soon after, count Brown hastily assembled an army in Bohemia, to oppose the king of Prussia, who had again penetrated

Brown. into that kingdom at the head of all his forces; and on the 6th of May fought the famous battle of Prague; in which, while he was employed in giving his orders for maintaining the advantages he had gained over the Prussians, he was so dangerously wounded, that he was obliged to be carried to Prague, where he died of his wounds, on the 26th of June 1757, at 52 years of age. There is reason to believe, that, had he not been wounded, he would have gained the victory, as he had broken the Prussians, and the brave count Schwerin, one of their greatest generals, was slain.

BROWN (Sir Thomas), an eminent physician and celebrated writer, was born at London, October 19th 1605. Having studied at Winchester college, and afterwards at Oxford, he travelled through France and Italy; and returning by the way of Holland, took his degree of doctor of physic at Leyden. In 1636, he settled at Norwich; and the year following, was incorporated as doctor of physic at Oxford. His *Religio Medici* made a great noise; and being translated into Latin, instantly spread throughout Europe, and gained him a prodigious reputation; it was then translated into almost every language in Europe. This book has been heavily censured by some, as tending to infidelity, and even atheism; while others, with much more reason, have applauded the piety, as well as the parts and learning, of the author. The reverend Mr Granger observes, that among other peculiarities in this book, he speaks of the ultimate act of love as a folly beneath a philosopher; and says, that he could be content that we might procreate, like trees, without conjunction: but, after the writing of it, he descended from his philosophic dignity, and married an agreeable woman. It was said, that his reason for marrying was, because he could discover no better method of procreation. His Treatise on Vulgar Errors was read with equal avidity; he also published *Hydriotaphia*, or a Discourse of Sepulchral Urns lately found in Norfolk. His reputation in his profession was equal to his fame for learning in other respects; and therefore the college of physicians were pleased to take him into their number as an honorary member; and king Charles II. coming to Norwich in his progress, in 1671, was pleased to knight him, with singular marks of favour and respect. He died on his birth-day, in 1682, leaving several manuscripts behind him, which were published under the title of *The posthumous works of the learned Sir Thomas Brown, Knt. M. D.*

BROWN (Edward), the son of the former, physician to king Charles II. and president of the royal college at London. He was born in the year 1642; and studied at Cambridge, and afterwards at Merton college, Oxford. He then travelled; and at his return published a brief account of some travels in Hungary, Servia Bulgaria, Macedonia, Thessaly, Austria, Styria, Carinthia, Carniola, Friulia, &c.: he also published an account of several travels through great part of Germany; and joined his name to those of many other eminent men, in a translation of Plutarch's lives. He was acquainted with Hebrew, was a critic in Greek, and no man of his age wrote better Latin. High Dutch, Italian, French, &c. he spoke and wrote with as much ease as his mother-tongue. King Charles said of him, that "he was as learned as any

of the college, and as well-bred as any at court." He **Brown.** died August 27th 1708.

BROWN (William), an English poet of the 17th century, was descended from a good family, and born at Tavistock in Devonshire in the year 1590. After he had passed through the grammar school, he was sent to Exeter college in the university of Oxford, in the beginning of the reign of James I. and became tutor to Robert Dormer, who was afterwards earl of Carnarvon, and killed at Newbury battle, September 20th 1643. He is styled in the public register of the university, "a man well skilled in all kinds of polite literature and useful arts;" *vir omni humana literatura et bonarum artium cognitione instructus*. After he had left the college with his pupil, he was taken into the family of William earl of Pembroke, who had a great respect for him; and he made his fortune so well, that he purchased an estate. His poetical works procured him a very great reputation. They are as follow: 1. Britannia's pastorals. The first part was published at London, 1613, in folio; and ushered into the world with several copies of verses made by his ingenious and learned friends John Selden, Michael Drayton, Christopher Cook, &c. The second part was printed at London in 1616, and recommended by various copies of verses written by John Glanville, who afterwards became eminent in the profession of the law, and others. These two parts were reprinted in two vols 8vo, 1625. 2. The shepherd's pipe, in seven eclogues; London, 1614, in 8vo. 3. An elegy on the never-enough bewailed death of prince Henry, eldest son of king James I. Mr Wood tells us, that it is probable our author wrote several other poems which he had not seen. It is uncertain when he died.

BROWN (Thomas), "of facetious memory," as he is styled by Addison, was the son of a farmer in Shropshire; and entered in Christ-church college, Oxford, where he soon distinguished himself by his uncommon attainments in literature. But the irregularities of his life not suffering him to continue long there, he, instead of returning to his father, went to London to seek his fortune: his companions, however, being more delighted with his humour than ready to relieve his necessities, he had recourse to the usual refuge of half-starved wits, scribbling for bread; and published a great variety of poems, letters, dialogues, &c. full of humour and erudition, but often indelicate. Though a good-natured man, he had one pernicious quality, which was, rather to lose his friend than his joke.

Towards the latter end of Tom Brown's life, we are informed by Mr Jacob, that he was in favour with the earl of Dorset, who invited him to dinner on a Christmas day, with Mr Dryden, and some other gentlemen celebrated for their ingenuity, (as his lordship's custom was); when Mr Brown to his agreeable surprise found a bank note of 50l. under his plate, and Mr Dryden at the same time was presented with another of 100l. Mr Brown died in the year 1704; and was interred in the cloyster of Westminster abbey, near the remains of Mrs Behn, with whom he was intimate in his lifetime. His works have been printed both in 8vo and 12mo, making 4 vols.

BROWN (Dr John), a clergyman of the church of England, and an ingenious writer, was born at Rothbury

Brown. bury in Northumberland in November 1715. His father John Brown, was a native of Scotland, of the Browns of Colstoun near Haddington; and at the time of his son's birth was curate to Dr Thomlinson rector of Rothbury. He was afterwards collated to the vicarage of Wigton in Cumberland; to which place he carried his son, who received the first part of his education there. Thence he was removed in 1732 to the university of Cambridge, and entered of St John's college, under the tuition of Dr Tunstall. After taking the degree of bachelor of arts with great reputation (being amongst the list of wranglers, and his name at the head of the list), he returned to Wigton, and received both deacon's and priest's orders from Sir George Fleming bishop of Carlisle. Here he was appointed by the dean and chapter a minor canon and lecturer of the cathedral church. For some years he lived here in obscurity; and nothing farther is known concerning him, than that in 1739 he went to Cambridge to take his degree of master of arts. In 1745 he distinguished himself as a volunteer in the king's service, and behaved with great intrepidity at the siege of Carlisle. After the defeat of the rebels, when several of them were tried at the assizes held at Carlisle in the summer of 1746, he preached at the cathedral church of that city two excellent discourses, on the mutual connection between religious truth and civil freedom; and between superstition, tyranny, irreligion, and licentiousness.

Mr Brown's attachment to the royal cause and to the Whig party procured him the friendship of Dr Osbaldeston who was the only person that continued to be his friend through life; the peculiarities of Mr Brown's temper, or some other cause, having produced quarrels with every one else. When Dr Osbaldeston was advanced to the see of Carlisle, he appointed Mr Brown to be one of his chaplains.

It was probably in the early part of his life, and during his residence at Carlisle, that Mr Brown wrote his poem intitled *Honour*, inscribed to the lord viscount Lonsdale. Our author's next poetical production was his *Essay on Satire*; and which was of considerable advantage to him both in point of fame and fortune. It was addressed to Dr Warburton; to whom it was so acceptable, that he took Mr Brown into his friendship, and introduced him to Ralph Allen, Esq; of Prior Park, near Bath, who behaved to him with great generosity, and at whose house he resided for some time.

In 1751 Mr Brown published his "Essays on the Characteristics of lord Shaftesbury, &c." dedicated to Ralph Allen, Esq. This was received with a high degree of applause, though several persons attempted to answer it. In 1754 our author was promoted by the earl of Harwicke to the living of Great Horkeley in Essex.

In 1755, our author took the degree of doctor of divinity at Cambridge. This year he published his tragedy of *Barbarossa*; which, under the management of Mr Garrick, was acted with considerable applause; but when it came to be published, it was exposed to a variety of strictures and censures. This tragedy introduced our author to the acquaintance of that eminent actor; by whose favour he had a second tragedy, named *Albelfan*, represented

at Drury-Lane play-house. This was also well received by the public; but did not become so popular as *Barbarossa*, nor did it preserve so long the possession of the stage.

In 1757 appeared his famous "Estimate of the Manners and Principles of the Times." The reception which this work met with from the public was very flattering to his vanity; no fewer than seven editions of it having been printed in little more than a year. The chief design of this performance was to show, that a vain, luxurious, and selfish effeminacy in the higher ranks of life marked the character of the age; and to point out the effects and sources of this effeminacy. Several antagonists appeared, some of whom were neither destitute of learning nor ingenuity; though Dr Brown himself asserted that Mr Wallace, a clergyman of Edinburgh, was the only candid and decent adversary that appeared against him. The testimony given by M. de Voltaire to the effect which the estimate had on the conduct of the nation, is very honourable to Dr Brown. "When Marshal Richelieu, in 1756 (says that celebrated writer), laid siege to Port Mahon, the capital of Minorca, the British sent out admiral Byng with a strong naval force, to drive the French fleet off the island, and raise the siege. At this time there appeared a book, intitled *An Estimate of the Manners of the Times*; of which there was no less than five editions printed off in London in the space of three months. In this treatise the author proves that the English nation was entirely degenerated;—that it was near its ruin;—that its inhabitants were no longer so robust and hardy as in former times;—and that its soldiers had lost their courage.—This work roused the sensibility of the English nation, and produced the following consequences. They attacked, almost at one and the same time, all the sea coasts of France, and her possessions in Asia, Africa, and America." In 1758, our author published the second volume of his *Estimate of the Manners and Principles of the Times*; containing additional remarks on the ruling manners and principles, and on the public effects of those manners and principles. The design of this volume was, to retract such mistakes as he thought he had committed; to prove such points as were affirmed and not proved; to illustrate those particulars which were hinted, but not explained; to reply to such capital objections as had been made to his general system by preceding writers on the same subject; and to display the consequences which might be fairly deduced from his principles, and through a designed brevity were omitted in the first volume. But it unfortunately happened that the Doctor's self-opinion, which gave so much offence in his first volume, broke out in the second with still greater violence. The consequence of this was, that he exposed himself to general censure and dislike; and the prejudices against him occasioned the real excellencies of the work to be very much overlooked. The periodical critics, whom he had gone needlessly out of his way to abuse, treated him with uncommon severity; and such a multitude of antagonists rose against him, so many objections were urged upon him, by friends as well as enemies, that he seems to have been deeply impressed, and to have retired for a while into the country. From the country it was that

Brown. that he wrote, in a series of letters to a noble friend, "An Explanatory Defence of the Estimate of the Manners and Principles of the Times; being an appendix to that work, occasioned by the clamours lately raised against it among certain ranks of men."

But while Dr Brown thus distinguished himself as a political writer, he was advanced to no higher dignity in the church: nay, on some disgust, it is supposed, he resigned his living in Essex: however, in recompence, Dr Osbaldeston procured him the rectory of St Nicholas in Newcastle on Tyne. He would probably have received further favours from this prelate, had not the latter died soon after his promotion to the see of London.

In 1760 our author published an Additional Dialogue of the Dead, between Pericles and Aristides; being a sequel to a dialogue of lord Lyttleton's between Pericles and Cosmo. One design of this additional dialogue was to vindicate the measures of Mr Pitt, against whose administration lord Lyttleton had been supposed to have thrown out some hints. Our author's next publication, in 1763, was "The cure of Saul," a sacred ode; which was followed in the same year by "A Dissertation on the Rise, Union, and Power, the Progressions, Separations, and Corruptions of Poetry and Music." This is one of the most pleasing of Dr Brown's performances, and abounds with a variety of critical discussions. A number of strictures on this piece were published; and the Doctor defended himself in a treatise intitled *Remarks on some Observations on Dr Brown's Dissertations on Poetry and Music*. In 1764 our author published, in octavo, "The History of the Rise and Progress of Poetry through its several Species;" which is no more than the substance given in the dissertation abovementioned. The same year Dr Brown published a volume of sermons, dedicated to his patron Dr Osbaldeston bishop of London; but most, if not all, of these, had been separately published, excepting the first three, which were on the subject of education. In the beginning of the year 1765, the doctor again returned to politics, and published "Thoughts on Civil Liberty, Licentiousness, and Faction." At the conclusion of this work the author prescribed a code of education, upon which Dr Priestley made remarks at the end of his "Essay on the Course of a liberal Education for civil and active Life." The same year he published a sermon "On the Female Character and Education," preached on the 16th of May 1765, before the guardians of the asylum for deserted female orphans. His last publication was in 1766, "A Letter to the Rev. Dr Lowth, occasioned by his late Letter to the Right Rev. Author of the Divine Legation of Moses." This was occasioned by Dr Lowth's having *clearly*, though *indirectly*, pointed at Dr Brown as one of the extravagant adulators and defenders of bishop Warburton. Besides these works, Dr Brown published a poem on Liberty, and two or three anonymous pamphlets. At the end of several of his latter writings, he advertised his design of publishing "Christian Principles of Legislation," but was prevented from executing it by his death; though the work appears to have been completed.

We come now to the concluding events of our author's life; concerning which the following is the most authentic intelligence that can be procured. Whilst

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Brown. Dr Dumaresq resided in Russia in the year 1765, to which he had been invited the preceding year to give his advice and assistance for the establishment and regulation of several schools which her Imperial majesty intended to erect, he received a letter from a lady of distinguished character in England, recommending to him Dr Brown as a proper correspondent on this occasion. Dr Dumaresq then wrote a letter to Dr Brown, telling him the occasion of his application, and the difficulties that occurred. He had imagined that nothing more would be wanted of him than what concerned classical learning, and a general foundation for the sciences; as that had been the common introduction to every kind of useful knowledge in the western parts of Europe. But on his arrival he found that a much more extensive scheme was required; and such as extended not only to learning properly so called, but also to matters military and naval, civil and commercial. But having stated his difficulties in executing this plan to Dr Brown, the latter proposed a scheme still more extensive; and which was no less than a general plan of civilization throughout the whole Russian empire. In this plan, however, though it showed very enlarged ideas and great strength of mind, there were several defects which rendered it, as Dr Brown himself was afterwards convinced, impracticable. He had laid greater stress upon the support, energy, and efficacy of absolute power in princes when exerted in a good cause, than experience would warrant; and he was ready to imagine that the bulk of the Russian nation, just emerging out of barbarism, was like a *tabula rasa*, upon which any characters might be written. At last the Doctor's letter was laid before the empress, who was so pleased with it that she immediately invited him to Russia. He accepted the invitation, and procured his Majesty's leave to go; 1000 l. were ordered for his expence, and he actually received 200 l. But when he was on the point of setting out, an attack of the gout and rheumatism, to which he had been all his lifetime subject, so impaired his health, that his friends dissuaded, and at last succeeded in preventing him from going. The money was returned excepting 97 l. 6s. which had been expended in necessities for the intended journey. But though he thus declined the journey, a long letter which he afterwards wrote to the empress, and which does honour to his abilities, shows that he had not abandoned his intention of being serviceable. The affair, however, taking in all its circumstances, did no doubt greatly agitate his mind; and his being obliged at length to give up the journey, must have been no small disappointment to a man of his sanguine expectations. This disappointment concurring with the general state of his health, and perhaps the recollection of some other failures that had happened, was followed by a dejection of spirits; in consequence of which he put an end to his life on the 23d of September 1766, in the 51st year of his age. On the morning of that day his servant came into his bed-chamber, and asked him what sort of a night he had had? to which he replied, "A pretty good one." The servant having quitted the bedside for a few minutes, heard a noise in the Doctor's throat, which he imagined to be owing to some obstruction occasioned by phlegm. Going to assist his master, he found him speechless, and bleeding profuse-

Brown. ly, having cut the jugular vein with a razor; and this he had done so effectually, that death speedily ensued. Such was the unhappy end of this ingenious writer; but the manner of it, when some previous circumstances of his life are understood, will cast no stain on his character. He had a tendency to insanity in his constitution; and, from his early life, had been subject at times to some disorder in his brain, at least to melancholy in its excess. Mrs Gilpin of Carlisle, soon after Dr Brown's decease, wrote in the following terms in a letter to a friend. "His distemper was a frenzy, to which he had by fits been long subject; to my own knowledge above 30 years. Had it not been for Mr Farish frequently, and once for myself, the same event would have happened to him long ago. It was no premeditated purpose in him; for he abhorred the thought of self-murder; and in bitterness of soul expressed his fears to me, that one time or another some ready mischief might present itself to him, at a time when he was wholly deprived of his reason."

BROWN (Simon), a dissenting minister, whose uncommon talents and singular misfortunes intitle him justly to a place in this work, was born at Shepton Mallet in Somersetshire, 1680. Grounded and excelling in grammatical learning, he early became qualified for the ministry, and actually began to preach before he was twenty. He was first called to be a pastor at Portsmouth, and afterwards removed to the Old Jewry, where he was admired and esteemed for a number of years. But the death of his wife and only son, which happened in 1723, affected him so as to deprive him of his reason; and he became from that time lost to himself, to his family, and to the world: his congregation at the Old Jewry, in expectation of his recovery, delayed for some time to fill his post; yet at length all hopes were over, and Mr Samuel Chandler was appointed to succeed him in 1725. This double misfortune affected him at first in a manner little different from distraction, but afterwards sunk him into a settled melancholy. He quitted the duties of his function, and would not be persuaded to join in any act of worship, public or private. Being urged by his friends for a reason of this extraordinary change, at which they expressed the utmost grief and astonishment, he told them, after much importunity, that "he had fallen under the sensible displeasure of God, who had caused his rational soul gradually to perish, and left him only an animal life in common with brutes: that, though he retained the human shape, and the faculty of speaking in a manner that appeared to others rational, he had all the

while no more notion of what he said than a parrot; that it was therefore profane in him to pray, and incongruous to be present at the prayers of others;" and, very consistently with this, he considered himself no longer as a moral agent, or subject of either reward or punishment. In this way of thinking and talking he unalterably and obstinately persisted to the end of his life; though he afterwards suffered, and even requested, prayers to be made for him. Some time after his secession from the Old Jewry, he retired to Shepton Mallet, his native place; and though in this retirement he was perpetually contending that his powers of reason and imagination were gone, yet he was as constantly exerting both with much activity and vigour. He amused himself sometimes with translating parts of the ancient Greek and Latin poets into English verse: he composed little pieces for the use of children; An English Grammar and Spelling Book; An Abstract of the Scripture-History, and A Collection of Fables, both in metre; and with much learning he brought together into a short compass all the *Themata* of the Greek and Latin tongues, and also compiled a Dictionary to each of those works, in order to render the learning of both these languages more easy and compendious. Of these performances none have been made public. But what showed the strength and vigour of his understanding, while he was daily bemoaning the loss of it, were two works composed during the two last years of his life, in defence of Christianity, against Woolston and Tindal. He wrote an answer to Woolston's fifth Discourse on the Miracles of our Saviour, intitled, A fit rebuke for a ludicrous Infidel, with a preface concerning the prosecution of such writers by the civil power. The preface contains a vigorous plea for liberty, and is strongly against prosecutions in matters of religion; and in the Answer, Woolston is as well managed as he was by any of his refuters, and more in his own way too. His book against Tindal was called, A Defence of the Religion of Nature and the Christian Revelation, against the defective account of the one and the exceptions against the other, in a book intitled, Christianity as old as the Creation; and it is allowed to be as good a one as that controversy produced. He intended to dedicate it to Queen Caroline; but as the unhappy state of his mind appeared in the dedication, some of his friends very wisely suppressed it, as sure to defeat the use and intent of his work. The copy however was preserved, and is subjoined in the note (A), as much too great a curiosity to be suppressed. The above pieces were published.

(A) Madam, Of all the extraordinary things that have been rendered to your royal hands since your first happy arrival in Britain, it may be boldly said, what now bespeaks your majesty's acceptance is the chief. Not in itself indeed: it is a trifle unworthy your exalted rank, and what will hardly prove an entertaining amusement to one of your majesty's deep penetration, exact judgement, and fine taste; but on account of the author, who is the first being of the kind, and yet without a name. He was once a man, and of some little name; but of no worth, as his present unparalleled case makes but too manifest: for, by the immediate hand of an avenging God, his very thinking substance has for more than seven years been continually wasting away, till it is wholly perished out of him, if it be not utterly come to nothing. None, no, not the least remembrance of its very ruins remains; not the shadow of an idea is left; nor any sense, so much as one single one, perfect or imperfect, whole or diminished, ever did appear to a mind within him, or was perceived by it. Such a present from such a thing, however worthless in itself, may not be wholly unacceptable to your majesty, the author being such as history cannot parallel; and if the fact, which is real, and no fiction or wrong conceit, obtains credit,

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ed by Mr, afterwards Dr W. Harris, who, in an advertisement to the reader, recommends the afflicted case of the author, under a deep and peculiar melancholy, to the compassion and prayers of all his friends, and every serious Christian. Mr Brown survived the publication of this last work a very short time. A complication of distempers, contracted by his sedentary life (for he could not be prevailed on to refresh himself with air and exercise), brought on a mortification, which put a period to his labours and sorrows about the latter end of 1732. He was unquestionably a man of uncommon abilities and learning: his management of Woolston showed him to have also vivacity and wit: and, notwithstanding that strange conceit which possessed him, it is remarkable that he never appeared feeble or absurd, except when the object of his frenzy was before him. Besides the two pieces above mentioned, and before he was ill, he had published some single Sermons, together with a Collection of Hymns and Spiritual Songs. He left several daughters.

BROWN (Isaac Hawkins), an ingenious English poet, was born at Burton upon Trent, Staffordshire, Jan. 21. 1705-6; of which place his father was the minister. He received his grammatical institution first at Lichfield, then at Westminster; whence, at sixteen years of age, he was removed to Trinity college, Cambridge, of which his father had been fellow. He remained there till he had taken a master of arts degree; and about 1727 settled himself in Lincoln's Inn, where he seems to have devoted more of his time to the Muses than to the law. Soon after his arrival there, he wrote a poem on *Design and Beauty*, which he addressed to Mr Highmore the painter, for whom he had a great friendship. Several other poetical pieces were written here, and particularly his *Pipe of Tobacco*. This is in imitation of Cibber, Ambrose, Phillips, Thomson, Young, Pope, and Swift, who were then all living; and is reckoned one of the most pleasing and popular of his performances. In 1743-4, he married the daughter of Dr Trimnell, archdeacon of Leicester.

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He was chosen twice to serve in parliament, first in 1744, and afterwards in 1748: both times for the borough of Wenlock in Shropshire, near which place he possessed a considerable estate, which came from his maternal grandfather, Isaac Hawkins, Esq. In 1754, he published what has been deemed his capital work, *De Animi Immortalitate*, in two books; in which, besides a most judicious choice of matter and arrangement, he is thought to have shown himself not a servile but happy imitator of Lucretius and Virgil. The universal applause and popularity of this poem produced several English translations of it in a very short time; the best of which is that by Soame Jenyns, Esq. printed in his *Miscellanies*. Mr Brown intended to have added a third part, but went no farther than to leave a fragment. This excellent person died, after a lingering illness, in 1760, aged 55. In 1768, the present Hawkins Brown, Esq; obliged the public with an elegant edition of his father's poems, in large octavo; to which is prefixed a print of the author, from a painting of Mr Highmore, engraved by Ravenet.

BROWN (Sir William), a noted physician and multifarious writer, was settled originally at Lynn in Norfolk, where he published a translation of Dr Gregory's *Elements of Catoptrics and Dioptrics*; to which he added, 1. A Method for finding the Foci of all Specula, as well as Lens's universally; as also magnifying or lessening a given Object by a given Speculum or Lens, in any assigned Proportion. 2. A Solution of those Problems which Dr Gregory has left undemonstrated. 3. A particular Account of Microscopes and Telescopes, from Mr Huygens; with the Discoveries made by Catoptrics and Dioptrics. Having acquired a competence by his profession, he removed to Queen's Square, Ormond Street, London, where he resided till his death. By his lady, who died 1763, he had one daughter, grandmother to the present Sir Martin-Brown Folkes, bart. A great number of lively essays, both in prose and verse, the production of his pen, were printed and circulated among his friends. The active

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credit, it must be recorded as the most memorable, and indeed astonishing, even in the reign of George II. that a tract, composed by such a thing, was presented to the illustrious Caroline; his royal consort needs not be added; fame, if I am not misinformed, will tell that with pleasure to all succeeding times. He has been informed, that your majesty's piety is as genuine and eminent as your excellent qualities are great and conspicuous. This can indeed be truly known to the great Searcher of hearts only. He alone, who can look into them, can discern if they are sincere, and the main intention corresponds with the appearance; and your majesty cannot take it amiss if such an author hints, that his secret approbation is of infinitely greater value than the commendation of men, who may be easily mistaken, and are too apt to flatter their superiors. But, if he has been told the truth, such a case as his will certainly strike your majesty with astonishment; and may raise that commiseration in your royal breast, which he has in vain endeavoured to excite in those of his friends: who, by the most unreasonable and ill-founded conceit in the world, have imagined, that a thinking being could for seven years together live a stranger to its own powers, exercises, operations, and state; and to what the great God has been doing in it and to it. If your majesty, in your most retired address to the King of kings, should think of so singular a case, you may perhaps make it your devout request, that the reign of your beloved sovereign and consort may be renowned to all posterity by the recovery of a soul now in the utmost ruin, the restoration of one utterly lost, at present amongst men. And should this case affect your royal breast, you will recommend it to the piety and prayers of all the truly devout who have the honour to be known to your majesty: many such doubtless there are, though courts are not usually the places where the devout resort, or where devotion reigns. And it is not improbable, that multitudes of the pious throughout the land may take a case to heart, that under your majesty's patronage comes thus recommended. Could such a favour as this restoration be obtained from heaven by the prayers of your majesty, with what transport of gratitude would the recovered being throw himself at your majesty's feet, and, adoring the divine power and grace, profess himself, Madam, your majesty's most obliged and dutiful servant,

SIMON BROWN.

Brown
Brownists.

part taken by Sir William Brown in the contest with the licentiates, 1768, occasioned his being introduced by Mr Foote in his *Devil upon Two Sticks*. Upon Foote's exact representation of him with his identical wig and coat, tall figure, and glass stiffly applied to his eye, he sent him a card complimenting him on having so happily represented him; but as he had forgot his muff, he had sent him his own. This good-natured method of resenting disarmed Foote. He used to frequent the annual ball at the ladies boarding-school, Queen Square, merely as a neighbour, a good-natured man, and fond of the company of sprightly young folks. A dignitary of the church being there one day to see his daughter dance, and finding this upright figure stationed there, told him he believed he was *Hermippus redivivus*, who lived *anbelitu puellarum*. When he lived at Lynn, a pamphlet was written against him: he nailed it up against his house-door. At the age of 80, on St Luke's day, 1771, he came to Batson's coffee-house in his laced coat and band, and fringed white gloves, to show himself to Mr Crosby, then lord mayor. A gentleman present observing that he looked very well, he replied, *he had neither wife nor debts*. He died in 1774, at the age of 82; and by his will he left two prize-medals to be annually contended for by the Cambridge poets.

BROWN, among dyers, painters, &c. a dusky colour inclining towards redness. Of this colour there are various shades or degrees, distinguished by different appellations; for instance, Spanish-brown, a sad-brown, a tawney-brown, the London brown, a clove-brown, &c.

Spanish-brown is a dark dull red, of a horse-flesh colour. It is an earth; and is of great use among painters, being generally used as the first and priming colour that they lay upon any kind of timber-work in house-painting. That which is of the deepest colour, and freest from stones, is the best. Though this is of a dirty brown colour, yet it is much used, not to colour any garment, unless it be an old man's gown; but to shadow vermilion, or to lay upon any dark ground behind a picture, or to shadow yellow berries in the darkest places, when you want lake, &c. It is best and brightest when burnt in the fire till it be red-hot; although, if you would colour any hare, horse, dog, or the like, it should not be burnt: but, for other uses, it is best when it is burnt; as for colouring wood, posts, bodies of trees, or any thing else of wood, or any dark ground of a picture.

BROWNIA, in botany; a genus of the endecandria order, belonging to the monadelphia class of plants. The calyx is bifid, the corolla double, the exterior quinquefid, and the interior pentapetalous. There is but one species, the coccinea, a native of the West Indies.

BROWNISTS, a religious sect, which sprung out of the Puritans, towards the close of the 16th century: their leader, Robert Brown, wrote divers books in their behalf, was a man of good parts, and some learning. He was born of a good family in Rutlandshire, and related to the lord-treasurer Burleigh. He had been educated at Cambridge; but first published his notions, and began to inveigh openly against the discipline and ceremonies of the church, at Norwich, in the year 1580, from which time he underwent di-

vers persecutions from the bishops; infomuch that he boasted he had been committed to no less than 32 prisons, in some of which he could not see his hand at noon-day. At length, with his congregation, he left the kingdom, and settled at Middleburgh in Zealand; where they obtained leave of the states to worship God in their own way, and form a church according to their own model; which they had not long done before this handful of men, just delivered from the severities of the bishops, began to differ among themselves, and crumble into so many parties, that Brown their pastor grew weary of his office; and, returning to England in 1589, renounced his principles of separation, and was preferred to the rectory of a church in Northamptonshire, and died, after leading a very idle and dissolute life, in 1630.

The revolt of Brown was attended with the dissolution of the church at Middleburgh; but the seeds of Brownism, which he had sown in England, were so far from being destroyed, that Sir Walter Raleigh, in a speech in 1592, computes no less than 20,000 followers of it. The occasion of their separation was not any fault they found with the faith, but only with the discipline and form of government of the other churches in England. They equally charged corruption on the episcopal form, and on that of the presbyterians, by consistories, classes, and synods: nor would they join with any other reformed church, because they were not assured of the sanctity and regeneration of the members that composed it; on account of the toleration of sinners, with whom they maintained it an impiety to communicate. They condemned the solemn celebration of marriages in the church; maintaining, that matrimony being a political contract, the confirmation thereof ought to come from the civil magistrate. They would not allow any children to be baptized of such as were not members of the church, or of such as did not take sufficient care of those baptized before. They rejected all forms of prayer; and held that the Lord's prayer was not to be recited as a prayer, being only given for a rule or model whereon all our prayers are to be formed. The form of church-government which they established was democratical. When a church was to be gathered, such as desired to be members of it made a confession of it, and signed a covenant, by which they obliged themselves to walk together in the order of the gospel. The whole power of admitting and excluding members, with the decision of all controversies, was lodged in the brotherhood. Their church-officers were chosen from among themselves, for preaching the word, and taking care of the poor, and separated to their several offices by fasting, prayer, and imposition of hands of some of the brethren. But they did not allow the priesthood to be any distinct order, or to give any indelible character. As the vote of the brotherhood made a man a minister, and gave him authority to preach the word and administer the sacraments among them, so the same power could discharge him from his office, and reduce him to a mere layman again. And as they maintained the bounds of a church to be no greater than what could meet together in one place and join in one communion, so the power of these officers was prescribed within the same limits. The minister or pastor of one church could not administer the Lord's

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supper to another, nor baptise the children of any but those of his own society. Any lay-brother was allowed the liberty of prophesying, or of giving a word of exhortation to the people; and it was usual for some of them, after sermon, to ask questions, and reason upon the doctrines that had been preached. In a word, every church on the Brownists model is a body corporate, having full power to do every thing which the good of the society requires, without being accountable to any classis, synod, convocation, or other jurisdiction whatever. Most of their discipline has been adopted by the Independents, a party which afterwards arose from among the Brownists. The laws were executed with great severity on the Brownists; their books were prohibited by Queen Elizabeth, and their persons imprisoned, and many of them were hanged. The ecclesiastical commission and the star-chamber, in fine, distressed them to such a degree, that they resolved to quit their country. Accordingly, many families retired and settled at Amsterdam, where they formed a church, and chose Mr Johnson their pastor; and after him Mr Ainsworth, author of the learned commentary on the Pentateuch. Their church flourished near 100 years. See INDEPENDENTS.

BROWNY, the name of a serviceable kind of sprite, who, according to a superstitious notion formerly prevalent in the Hebrides and Highlands of Scotland (as well as among the country people in England, where he had the name of *Robin Goodfellow*), was wont to clean the houses, helped to churn, threshed the corn, and would belabour all that pretended to make a jest of him. He was represented as stout and blooming, had fine long flowing hair, and went about with a wand in his hand. He was the very counter part of Milton's *Lubber Fiend*, who

Tells how the drudging goblin swet,
To earn his cream-bowl duly set,
When in one night, ere glimpse of morn,
His shadowy flail hath thresh'd the corn,
That ten day-lab'ers could not end;
Then lies him down the Lubber Fiend,
And, stretch'd along the chimney's length,
Basks at the fire his hairy strength.

BROWSE, the tops of the branches of trees, whereon beasts feed. This is sometimes also called *brouce* and *bruttle*; probably from the French *brout*, which signifies the same thing.

BROWSE more properly denotes the food which deer find in young copses, continually sprouting anew.

BRUCE (Robert), son of the earl of Carrick, being competitor with Baliol for the crown of Scotland, lost it by the arbitration of Edward I. of England, for generously refusing to hold the crown of Scotland as depending on him, which his ancestors had left him independent. But Baliol having afterward broke his agreement with Edward, Bruce was easily persuaded by that king to side with him against Baliol, upon promise that he would settle him on the throne. Having contributed much to the breaking of Baliol's party, he demanded the accomplishment of king Edward's promise, who is said to have given him this answer: "What! have I nothing else to do but to conquer kingdoms for you?" However, he recovered his crown, defeated the English in several battles, raised

the glory of the Scots, and extended their dominions. See *History of Scotland*.

BRUCHSAL, a town of Germany, in the palatinate of the Rhine, and bishopric of Spire, situated on the river Satz, in E. Long. 8. 30. N. Lat. 49. 15.

BRUCHUS, in zoology, a genus of insects belonging to the order of coleoptera. The feelers are filiform, and gradually increase in thickness. There are seven species, viz. 1. The pisi, has grey elytra interspersed with white spots, and a white fundament with two black spots. It is a native of North America, and destroys whole fields of pease: It is now found in several of the southern parts of Europe; where it does great injury to the corn. 2. The theobromæ, with whitish elytra interspersed with black points. It frequents the theobromæ or chocolate-trees in the East Indies. 3. The gleditsiæ, with striated elytra of the same length with the belly, a pitch-coloured body, and green feelers. It is a native of America. 4. The baëtris, with smooth elytra, a hoary body, and the hind part of the thighs oval. It frequents the palm-trees of Jamaica. 5. The granarius, has black elytra; the fore-feet are red, and the hind-feet are dentated. It frequents the seeds of plants in different parts of Europe. 6. The seminarius is black, with the base of the feelers and fore-feet testaceous. It is about the size of a louse, and a native of Europe. 7. The pecticornis, with comb-shaped feelers longer than the body. It is a native of Barbary and China.

BRUEGHEL. See BREUGHEL.

BRUGES, a city of the Austrian Netherlands, capital of the territory of Bruges, with a bishop's see. It is seated in a plain eight miles from the sea; and has a great number of canals, made for the benefit of trade, one of which leads to Ghent, another to Ostend, another to Sluys, to Newport, to Furnes, to Ypres, and to Dunkirk, which you may reach in a day in the summer-time. All the waters about Bruges are without any current; but they may be changed in half an hour's time, by opening the sluices, and letting the water run into the sea. There are several bridges about the city, and that which was built in 1739 of free stone is very stately.

Bruges was in a very flourishing condition upwards of 200 years ago, and every nation had a consul here-in for the maintenance of their rights and privileges; but since the enlargement of Amsterdam and Antwerp, the trade is diminished, and its inhabitants are not numerous enough for so large a place. However, there are many rich merchants, and a chamber for trade. There are several fine churches; in the first rank of which is the cathedral, whose rich ornaments and treasure deserve notice. The finest square in the city is the great market, in which stand the halls, with public galleries, and a large court in the middle, and on one of its sides a high steeple supported only with four pillars. It is full of bells, with the most harmonious chimes in all the country. On the side of the great square there is a structure which serves for a public magazine to lay cloth in. It is built on a canal, and supported by pillars in such a manner, that small vessels can pass under it, to cross the city from the canal of Ostend to that of Ghent.

The square where the Wednesday's market is kept is very fine; for it contains several walks between two

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rows of trees, and a new guard-house in the middle. The Burg is a large square, in which is the town-house, built in the Gothic manner, and adorned with a variety of figures of the ancient counts and countesses of Flanders. In the same square there are several other public buildings. The church dedicated to the Virgin Mary is very fine, with a high steeple, which serves as a sea-mark for the ships that come to Ostend; on the inside are two tombs of copper gilt, of an extraordinary magnificence. Besides the cathedral and two collegiate churches, there are five parish churches, fourteen chapels, and twelve convents for men and women. There are a great many alms-houses and hospitals, one of which is called the *school of Bogards*, where there are about 180 boys, some of which are brought up to learning, others to trades, according to their genius. Their habit is cloth, and half of them wear blue and half red, with a black bonnet. There is also a school for poor girls, to the number of 120, clothed with red or blue. In short, there is no place in the Low Countries where they take more care of widows and orphans.

It is remarkable that the knights of the golden fleece were instituted in this city in 1430, when the marriage of Philip the Good was celebrated with Elizabeth princess of Portugal. The parts about the city, which belong to it, are called *Franc of Bruges*, and contain 37 villages, and enjoy perfect liberty, according to the tenor of their freedom. The fortifications of Bruges are but trifling, insomuch that in the time of war they always yield to the strongest party. It is eight miles east of Ostend, 24 north-east of Ghent, and 46 west of Antwerp. E. Long. 3. 5. N. Lat. 51. 11.

BRUGES (John of), (real name, John van Eick), a celebrated Flemish painter, and the first who discovered the method of painting in oil, flourished in the 15th century. He found in the course of his chemical experiments (to which science he also applied himself), that, by grinding colours with lintseed or nut-oil, he could form them into a solid body which would resist the water, and not need the varnish used in painting in water-colours or in fresco. He presented the first picture painted in this manner to Alphonse I. king of Naples, who was much pleased with it.

BRUIN (John de), professor of natural philosophy and mathematics at Utrecht, was born at Gorcum in 1620. He had uncommon skill in dissecting animals, and was a great lover of experiments. He made also observations in astronomy. He published dissertations *De vi altrice*; *De corporum gravitate et levitate*; *De cognitione Dei naturali*; *De lucis causa et origine*, &c. He had a dispute with Isaac Vossius, to whom he wrote a letter printed at Amsterdam in 1663; wherein he criticises Vossius's book *De natura et proprietate lucis*; and strenuously maintains the hypothesis of Descartes. He died in 1675, after he had been professor 23 years: and his funeral oration was pronounced four days after by M. Grævis.

BRUISE, in surgery, the same with CONTUSION.

BRUMALES PLANTÆ, in botany (from *bruma* winter); plants which flower in our winter: common about the Cape.

BRUMALIA, in Roman antiquity, festivals of Bacchus celebrated twice a year; the first on the 12th

of the kalends of March, and the other on the 18th of the kalends of November. They were instituted by Romulus, who during these feasts used to entertain the senate. Among other heathen festivals which the primitive Christians were much inclined to observe, Tertullian mentions the *brumæ* or *brumalia*.

BRUMOY (Peter), a learned Jesuit born at Rouen in 1668, distinguished himself in his youth by his talents for the belles lettres; and during his whole life was beloved for his probity, his virtue, and the goodness of his heart. He wrote many works, the most considerable of which is his *Theatre of the Greeks*. He died at Paris in 1742.

BRUN (Anthony le), an ambassador of Spain, famous for his skill in negotiating, was of an ancient and noble family, and born at Dole in the year 1600. He was attorney-general in the parliament of Dole; during which time he had a hand in all the state negotiations which concerned the provinces. He was sent afterwards by Philip IV. to the diet of Ratisbon, and from thence to the court of the emperor Ferdinand III. He was one of the plenipotentiaries of his Catholic majesty, at the conferences of Munster held in 1643; where, though all the other plenipotentiaries took place of him, yet it is said that he far exceeded them all in capacity. The king of Spain was particularly beholden to him for the peace which the Dutch made at Munster, exclusively of France; and the intriguing turn which he showed upon this occasion made him dreaded ever after by French ambassadors. He was a man of letters as well as of politics; and therefore employed his pen as well as his tongue in the service of his master. He died at the Hague, during his embassy, in the year 1654.

BRUN (Charles le), was descended of a family of distinction in Scotland, and born in the year 1619. His father was a statuary by profession. He discovered, it is said, such an early inclination for painting, that at three years of age he used to take coals, and design on the hearth and sides of the chimney, only by the light of the fire; and at 12 he drew the picture of his uncle so well, that it still passes for a fine piece. His father being employed in the gardens at Sequier, and having brought his son along with him, the chancellor of that name took a liking to him, and placed him with Simon Vouet, an eminent painter. He was afterwards sent to Fontainebleau, to take off some of Raphael's pieces. He sent him next to Italy, and supported him there for six years. Le Brun, in his return, met with the celebrated Poussin, by whose conversation he greatly improved himself in his art, and contracted a friendship with him which lasted as long as their lives. A painting of St Stephen, which he finished in 1651, raised his reputation to the highest pitch. Soon after this, the king, upon the representation of Mr Colbert, made him his first painter, and conferred on him the order of St Michael. His majesty employed two hours every day to see him work while he was painting the family of Darius at Fontainebleau. About the year 1662, he began his five large pieces of the history of Alexander the Great, in which he is said to have set the actions of that famous conqueror in a more glorious light than Quintus Curtius hath done in his history. He procured several advantages for the royal academy of painting and sculpture at Paris, and formed the plan

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There was scarce any thing done for the advancement of the fine arts in which he was not consulted. It was thro' the interest of M. Colbert that the king gave him the direction of all his works, particularly of his royal manufactory at the Gobelins, where he had a handsome house with a genteel salary assigned to him. He was also made director and chancellor of the royal academy, and showed the greatest zeal to encourage the fine arts in France. He was endowed with a vast inventive genius, which extended itself to arts of every kind. He was well acquainted with the manners and history of all nations. Besides his extraordinary talents, his behaviour was so genteel, and his address so pleasing, that he attracted the regard and affection of the whole court of France, where, by the places and pensions conferred on him by the king's liberality, he made a very considerable figure. Le Brun was the author of two treatises; one on physiognomy, and the other on the different characters of the passions. He died at Paris in 1690.

The talent of this painter, except for landscapes, was universal. He was not indeed admired for his colouring, nor for his skill in the distribution of his lights and shadows; but for a good gusto of design, an excellent choice of attitudes, an agreeable management of his draperies, a beautiful and just expression, and a strict observance of decorum. In fine, his compositions demand the attention and admiration of the nicest judges. The pieces that gained him greatest reputation were, besides what we have already mentioned, those which he finished at Fontainebleau, the great stair-case at Versailles, but especially the grand gallery there, which was the last of his works, and is said to have taken him up 14 years.

BRUNDISIUM, or *BRUNDISIUM*, (anc. geog.), a town of Calabria, with the best harbour in Italy. It was a very ancient town, and belonged originally to the Salentines; but was taken by the Romans about 256 years before Christ. Now *Brindisi*; which see.

BRUNIA, in botany; a genus of the monogynia order, belonging to the pentandria class of plants. The flowers are aggregate or clustered; the filaments inserted into the heels of the petals; the stigma is bifid; the seeds are solitary, and the capsule is bilocular. There are eight species.

BRUNO (Jordano), an atheistical writer, was born at Nolo in the kingdom of Naples; and about the year 1582 began to call in question some of the tenets of the Romish church, which occasioned his retiring to Geneva: but after two years stay there, he expressed his aversion to Calvinism in such a manner that he was expelled the city. After having staid some time at Lyons, Thoulouse, and Paris, he came to London, and continued two years in the house of Mr. Castlneau the French ambassador. He was very well received by Queen Elizabeth and the politer part of the court. His principal friends were Sir Philip Sidney and Sir Fulk Greville. With these and some others of their club, Bruno held assemblies; but as they treated of subjects of a very delicate nature, which could not suit the taste or capacity of every body, they kept the door always shut, and none but select persons were admitted into their company. At Sir Philip's request, he composed his *Spaccio della Bestia Trionfante*, which was

printed in 8vo, 1584, and dedicated to that gentleman. *Brunsbottle* This work, which is remarkable for nothing but its impiety, we are told in one of the Spectators, (n^o 389), sold at an auction in London for L. 30. From England he went to Wittemberg, and from thence to Prague, where he printed some tracts, in which he openly discovered his atheistical principles. After visiting some other towns in Germany, he made a tour to Venice. Here he was apprehended by order of the inquisition; tried; condemned; and refusing to retract, was burnt at the stake, February 9th 1600.

BRUNSBUTTLE, a sea port-town of Germany, in the circle of Lower Saxony, and duchy of Holstein, seated at the mouth of the river Elbe, in E. Long. 8. 42. N. Lat. 44. 30. It is subject to Denmark.

BRUNSFELSIA, in botany; a genus of the monogynia order, belonging to the pentandria class of plants. The corolla is funnel-shaped, and very long; and the fruit an unilocular polyspermous berry. There is but one species, viz. the americana. It rises with a woody branching rough stem six or eight feet high; garnished with oblong entire leaves on footstalks, and large whitish flowers by threes or fours at the ends of the branches, succeeded by round saffron-coloured soft fruit. This plant may be raised from seeds sown in pots in the spring, and plunged in a bark-bed. It may also be propagated by cuttings planted in pots in the same season, plunging them also in a bark-bed or other hot-bed under glasses. The plants must always remain in the stove.

BRUNSWICK, a city of Germany, in the circle of Lower Saxony, and capital of the duchy of the same name. It is composed of five towns, viz. the Old Town, the New Town, the Hagen or Burg, the Old Wieck, and the Sack, which makes it a large place, but the houses are almost all built of wood. There are several churches, one of which is an ancient Gothic building, but the appearance of its antiquity is almost absorbed by the repairs it has undergone. Brunswick is a fortified place, and would require a numerous army to besiege, and not a few men to defend it. It is of a square form, divided in the middle by the river Ocker. It is about two miles in circumference, and is strongly fortified. On the ramparts is a mortar piece of brass, ten feet six inches long, and nine feet two inches in circumference, weighing 1800 quintals, and has 93 quintals of iron in its carriages. It will carry a ball of 730 pounds weight to the distance of 33,000 paces, and throw a bomb of a thousand weight; but it requires 52 pounds of powder for a charge. This city is the residence of the prince whom we style the *duke of Brunswick Wolfenbottle*. The inhabitants of the city and parts adjacent carry on a considerable trade with Bohemia. Brunswick-mum is well known in England; a small sort of which is the common drink of the inhabitants of the city. The religion here is the Lutheran, and they observe it very strictly. The peasants are sober and laborious, but clownish and heavy; however, as they are robust and strong, they make good soldiers. The elector of Hanover is styled *duke of Brunswick*, though he has no property in, nor dominion over this city, which belongs to the duke of Brunswick Wolfenbottle. The number of inhabitants is about 24,000; and the whole income of the duke is estimated at L. 130,000. The academy of Brunswick,

Dr

Brunswick. Dr Moore informs us, has been new-modelled, and the plan of education improved, by the attention, and under the patronage of the hereditary prince. Students now resort to this academy from many parts of Germany; and there are generally some young gentlemen from Britain who are sent to be educated here. Such of them as are intended for a military life, will not find so many advantages united at any other place in the continent as at the Academy of Brunswick. They will here be under the protection of a family partial to the British nation;—every branch of science is taught by masters of known abilities;—the young students will see garrison duty regularly performed, and may by the interest of the prince obtain liberty to attend the reviews of the Prussian troops at Magdeburg and Berlin. They will have few temptations to expence, in a town where they can see no examples of extravagance;—have few opportunities of dissipation, and none of gross debauchery.

The fortifications at Brunswick were of great utility last war, and on one occasion they saved the town from being pillaged, and afforded prince Frederick, who is now in the Prussian service, an opportunity of performing an action, which it is imagined gave him more joy than twenty victories. This happened in the year 1761, soon after the battle of Kirch Denkern, when duke Ferdinand protected Hanover, not by conducting his army into that country, and defending it directly, as the enemy seemed to expect, and probably wished; but by diversion, attacking with strong detachments, commanded by the hereditary prince, their magazines in Hesse, and thus drawing their attention from Hanover to that quarter. While the duke lay encamped at Willhemsthal, watching the motions of Broglie's army, the marechal being greatly superior in numbers, sent a body of 20,000 men, under prince Xavier of Saxony, who took possession of Wolfenbuttle, and soon after invested Brunswick. Prince Ferdinand, anxious to save his native city, ventured to detach 5000 of his army, small as it was, under his nephew Frederick, assisted by general Luckener, with orders to harass the enemy, and endeavour to raise the siege. The young prince while on his march, sent a soldier with a letter to the governor, which was wrapped round a bullet, and which the soldier was to swallow in case of his being taken by the enemy.—He had the good fortune to get safe into the town. The letter apprised the commander of the garrison of the prince's approach, and particularised the night and hour when he expected to be at a certain place near the town, requiring him to favour his entrance.

In the middle of the night appointed, the prince fell suddenly on the enemy's cavalry, who unsuspecting of his approach, were encamped carelessly within a mile of the town. They were immediately dispersed, and spread such an alarm among the infantry, that they also retreated with considerable loss. Early in the morning the young prince entered Brunswick, amidst the acclamations of his fellow-citizens, whom he had relieved from the horrors of a siege. The hereditary prince having destroyed the French magazines in Hesse, had been recalled by his uncle, and ordered to attempt the relief of Brunswick. While he was advancing with all possible speed, and had got within a few leagues

of the town, he received the news of the siege being raised. On his arrival at his father's palace, he found his brother Frederick at table, entertaining the French officers, who had been taken prisoners the preceding night.

BRUNSWICK (the duchy of), is a county of Germany, bounded on the north by the duchy of Lunenburg; on the west, by the circle of Westphalia, from which it is separated by the river Weser; on the south by Hesse, and the little territory of Piechfeld; and on the east by Thuringia, with the principalities of Anhalt and Halberstadt, and the duchy of Magdeburg. The rivers are, the Weser, the Ocker, and the Lyne; and it is fertile both in corn and pastures. It is divided into three principalities, Wolfenbuttle, Grubenhagen, and Calenberg, which also comprehends the duchy of Gottingen. The principality of Wolfenbuttle has its own dukes; but the other two belong to the elector of Hanover. The territories of the house of Brunswick are more extensive; the principal of which are the duchies of Brunswick and Lunenburg, with the county of Danneburg, which is annexed thereto. The rest are Blankenburg, Dieport, and Hoyer, besides two or three smaller districts.

BRUNSWICK (the family of). The illustrious and ancient house of Brunswick owes its origin to Azo IV. of the family of Este, son of Hugo III. marquis of Ferrara in Italy. Azo, who died in 1055, left by his wife Cunegonde, daughter and heiress to Guelf III. Duke of Bavaria, a son, who was Guelf IV. great-grandfather to Henry the Lion. His son, Guelf V. surnamed the Valiant, was created duke of Bavaria by the Emperor Henry II. His son, Guelf VI. married Matilda, the richest heiress in Europe; but having no issue, his brother Henry the Black succeeded to his dominions. He died in 1125, having married Wulfhild daughter of Magnus, last duke of Saxony, of the Bulling family, by whom he had Henry the Proud, who succeeded to Bavaria in 1137; and he having married a daughter of the emperor Lotharius, his father-in-law granted him investiture of Saxony, and meant him for his successor in the empire; but this last he was disappointed of. Dying in 1139, both Saxony and Bavaria devolved on his son Henry V. surnamed the Lion. He married Maude, eldest daughter of king Henry II. of England, and is always looked upon as the founder of the Brunswick family: it is therefore extremely remarkable, that his present Majesty should be descended from one of our worthiest monarchs, in whom were united the royal Anglo-Saxon and Norman blood. The dominions possessed by Henry the Lion were the most extensive of any prince of his time; but having refused to assist the emperor Frederick Barbarossa in a war against Pope Alexander III. this drew the emperor's resentment on him; and being already jealous of his power and abilities, all his former services were forgotten; and in the diet of Wurtzburg in 1179 or 1180, he was proscribed. The duchy of Bavaria was given to Otho count Wittelbach, from whom is descended the present electoral family of Bavaria; the duchy of Saxony to Bernard Ascanius, founder of the house of Anhalt; and all his other territories disposed of to different persons. On this he retired to England; and by his father's intercession, Brunswick

Bruntisland **Brus** and Lunenburgh were restored to him. His wife Maude died in 1189, and he in 1195. He left three sons; but the two oldest not leaving any male issue, William, the third son, carried on the line of the family: and his son Otho was created duke of Brunswick and Lunenburgh in 1235, by the emperor Ferdinand II. From him all the succeeding dukes of this family have descended; and no family can boast of a line of princes who have more distinguished themselves, both by their political abilities and martial achievements; and they are allied to all the principal families in Europe. The house of Brunswick has divided into several branches. The present duke of Brunswick-Wolfenbittel is sprung from the eldest; the duke of Brunswick-Zell was from the second; and from this last sprung the elector of Hanover.

BRUNTISLAND, a parliament town of Fifeshire in Scotland, situated on the frith of Forth, eight miles north of Edinburgh, in W. Long. 3. 5. N. Lat. 56. 12. Here is the best harbour on the coast, formed by a rocky isle eked out with piers, for there are none on this side the country entirely natural. This is dry at low water. The church is square, with a steeple rising in the centre. The old castle, built by the *Duries*, commanded both town and harbour. The place has a natural strength, which, with the conveniency of a port opposite to the capital, made it, during the troubles of 1560, a most desirable post. The French, allies of the queen regent, fortified it strongly. In 1715, it was surprised and possessed by the rebels, who here formed the bold design of passing over a body of troops to the opposite shore; which was in part executed under the command of brigadier Macintosh, notwithstanding all the efforts of the men of war.

BRUSCHIUS (Gaspar), a Latin historian and poet, was born at Egra in Bohemia, in 1518. He was devoted to books from his childhood, and especially to poetry, in which he gained so much reputation, that he attained to the poetical crown, to the dignity of poet laureat, and of count palatine. He wrote with prodigious facility; and his verses are extremely flowing, easy, and natural. He published Latin poems on a great variety of subjects; the history of the bishops and bishoprics of Germany; history of German monasteries; and a great number of other works, of which a catalogue is given in Gesner's *Bibliothèque*. Bruschius was far from being rich, or rather he was very poor; subsisting almost entirely by the benefactions of his poetical patrons, and by presents from the abbots and abbesses whose monasteries he described. The liberalities of some abbots, while he was with Oporin at Basil, enabled him to buy a new suit of clothes; but when he found that appearing well dressed in the streets procured him many marks of respect from the vulgar, he tore his new finery to pieces, "as slaves that had usurped their master's honours." Bruschius seems to have been too great a philosopher for the age he lived in, or indeed for any age. He was murdered in the forest of Scalingenbach, between Rottemberg on the Tauber and Winsheim: and it was believed that this assassination was concerted and carried into execution by some gentlemen against whom Bruschius was about to write something.

BRUSH, an assemblage of hairs on hogs bristles fastened in the holes of a wooden handle or board,
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pierced for that purpose, serving to cleanse divers bodies by rubbing therewith. The manner of making brushes is by folding the hair or bristle in two; and bringing it by means of a packthread, which is engaged in the fold, through the holes with which the wood is pierced all over, being afterwards fastened therein with glue. When the holes are thus filled, the ends of the hair are cut to make the surface even.

Shearmens BRUSH, is made of wild boars bristles; and serves to lay the wool or nap of cloth, after shearing it for the last time.

BRUSH, among painters, a larger and coarser kind of a pencil made of hogs bristles, wherewith to lay the colours on their large pieces. The Chinese painters brush consists of the stalk of a plant; whose fibres being fretted at both ends, and tied again, serve for a brush.

Wire-BRUSHES, are used by silver-smiths and gilders, for scrubbing silver, copper, or brass pieces, in order to the gilding of them. There is a method of dyeing or colouring leather, performed by only rubbing the colour on the skin with a brush. This the French leather-gilders call *brouffure*; being the lowest of all the sorts of dye allowed by their statutes.

BRUSH of a Fox, among sportsmen, signifies his drag or tail, the tip or end of which is called the *shape*.

BRUSH is also used in speaking of a small thicket or coppice. In this sense the word is formed from the middle-age Latin *brustia*, *bruscus*, which signifies the same.

BRUSH-Wood denotes small slender wood or spray. See **BROWSE**.

BRUSH, in electricity, denotes the luminous appearance of the electric matter issuing in a parcel of diverging rays from a point. Beccaria ascribes this appearance to the force with which the electric fluid, going out of a point, divides the contiguous air, and passes through it to that which is more remote.

BRUSHING. Among jockies, a brushing gallop denotes a brisk one: a horse should have his brushing gallop in a morning before watering.

BRUSSELS, the capital of Brabant in the Austrian Netherlands, and generally the seat of the Austrian governor, is situated on the small river Senne, which runs through it. It is a rich and handsome city; and among the public structures, the ducal palace where the governor resides, the town-house, and the arsenal, are most superb. No city in Europe except Naples and Genoa makes a finer appearance at a distance: but, like them, when in the town, it is all up and down hill. It is encompassed with a double brick wall, and has seven gates; but being seven miles in compass, is too large to hold out a long siege. In Brussels are seven fine squares or market-places; that of the great market is one of the most beautiful in the world. The town-house takes up one quarter of it; and has a very high steeple, on the top of which is a brazen statue of St Michael, fifteen feet high. In one of the apartments, which is handsomely adorned, the states of Brabant meet. In three other rooms there is the history of the resignation of Charles V. wrought in tapestry; which is so well done, that it may be mistaken for painting. In the other parts of this square are the halls of the different trades. There are here several palaces of the nobility: that of Orange now belongs to the king of Prussia.

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Brussels

Brussels.
Brute.

Prussia. The opera-house is built after the Italian manner, with rows of boxes, in which are chimneys. One is covered over with looking-glass, so that they can sit by the fire, drink a bottle, and see what is doing. There are 20 public fountains, adorned with statues, at the corners of the most public streets; and in the middle of the town-house is one with Neptune, the tritons, and the horses spouting out water from their nostrils. The hospitals are well endowed, some of which are for the maintenance of strangers for three days. There is also a foundling hospital, and one for penitent courtezans. Among the churches, that of St Gudula is very magnificent. It stands on the top of a hill, near the gate of Louvain, and is surrounded with iron balustrades. It is an old Gothic structure, with two large steeples at the east end, and is finely adorned within. The Jesuits have a fine church as well as a library. There are several monasteries and nunneries, two of which last are English. The nunnery called the *Be-guinage* is like a little town, being surrounded by a wall and ditch, and has little streets, where each nun has an apartment. Six or seven hundred girls are educated here.

In 1695, Brussels was bombarded by marshal Villeroy, who demolished four thousand houses, the stadthouse, and several churches. In 1708, it was besieged again by the elector of Bavaria; but the duke of Marlborough soon came to its assistance, and obliged him to raise the siege with precipitation. Marshal Saxe, the French general, took it in 1746; but it was restored by the treaty of Aix-la-Chapelle. It is much fallen from its former splendor; and all the trade which is carried on there is in lace, camblets, and tapestry, which they make in great perfection. E. Long. 4. 8. N. Lat. 50. 51.

BRUSSELS (the quarter or district of), is one of the four parts of the duchy of Brabant. This quarter is bounded on the east by that of Louvain; on the north by that of Antwerp; on the west by Flanders; and on the south by Hainhalt. Brussels is the capital city of this quarter and all Brabant.

BRUTE, a general name for all animals except mankind.

Among brutes, the monkey kind bear the nearest resemblance to man; both in the external shape and internal structure, but more in the former than in the latter. In the monkey kind, the highest and the nearest approach to the likeness of man is the Oran Outang, or *Homo Sylvestris* †.—The structure and economy of brutes make the objects of what is called *Comparative Anatomy*. See that article.

Philosophers have been much puzzled about the essential characteristics of brutes, by which they may be distinguished from man. Some define a brute to be an *animal not risible*, or a *living creature incapable of laughter*; others call them *mute animals*. The peripatetics allowed them a sensitive power, but denied them a rational one. The Platonists allowed them reason and understanding, though in a degree less pure and refined than that of men. Lactantius allows every thing to brutes which men have except a sense of religion; and even this has been ascribed to them by some sceptics. Descartes maintained, that brutes are mere inanimate machines, absolutely destitute not only of reason but of all thought and perception, and that all their ac-

tions are only consequences of the exquisite mechanism of their bodies. This system, however, is much older than Descartes; it was borrowed by him from Gomez Pereira, a Spanish physician, who employed 30 years in composing a treatise which he intitled *Antoniana Margarita*, from the Christian names of his father and mother. It was published in 1554: but his opinion had not the honour of gaining partizans, or even of being refuted; so that it died with him. Even Pereira seems not to have been the inventor of this notion; something like it having been held by some of the ancients, as we find from Plutarch and St Augustin. Others, who rejected the Cartesian hypothesis, have maintained that brutes are endowed with a soul essentially inferior to that of men; and to this soul some have allowed immortality, others not. And, lastly, in a treatise published by one Bougeant a Jesuit, intitled, *A philosophical amusement on the language of beasts*, he affirms that they are animated by evil spirits or devils.

The opinion of Descartes was probably invented, or at least adopted, by him to defeat two great objections: one against the immortality of the souls of brutes, if they were allowed to have any; the other against the goodness of God, in suffering creatures who had never sinned, to be subjected to so many miseries. The arguments in favour of it may be stated as follow: 1. It is certain, that a number of human actions are merely mechanical; because they are done imperceptibly to the agent, and without any direction from the will; which are to be ascribed to the impression of objects and the primordial disposition of the machine, wherein the influence of the soul has no share; of which number are all habits of the body acquired from the reiteration of certain actions. In all such circumstances, human beings are no better than automata. 2. There are some natural movements so involuntary, that we cannot restrain them; for example, that admirable mechanism ever on the watch to preserve an equilibrium, when we stoop, bend, or incline our bodies in any way, and when we walk upon a narrow plank. 3. The natural liking for, and antipathy against, certain objects, which in children precede the power of knowing and discriminating them, and which sometimes in grown persons triumph over all the efforts of reason; are all phenomena to be accounted for from the wonderful mechanism of the body, and are so many cogent proofs of that irresistible influence which objects have on the human frame. 4. Every one knows how much our passions depend on the degree of motion into which the blood is put, and the reciprocal impressions caused by the animal-spirits between the heart and brain, that are so closely connected by their nerves; and if such effects may be produced by such simple mechanical means as the mere increase of motion in the blood, without any direction of the will, we are not to wonder at the actions of brutes being the effects only of a refined mechanism, without thought or perception. 5. A farther proof will arise from a consideration of the many wonderful effects which even the ingenuity of men has contrived to bring about by mechanical means; the androide, for instance, of Mr Kempell, which plays at chess. Now, it is not to be questioned, but that the mechanism of the body of the meanest animal infinitely

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† See *Simia*.

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initely surpasses that of Mr Kempell's machine; and what can be the consequence of this, but that the actions of that animal must be proportionably more surprising than those of the wooden chess-player? See *ANDROIDES* and *AUTOMATON*.

The above is a short abstract of all the arguments that are brought in favour of the Cartesian system: but they are evidently very far from being conclusive. They are deficient, in the first place, because, though we allow them in the utmost extent the Cartesians themselves can desire, they prove only the possibility of brutes being inanimate, and that the power of God actually could produce such and such actions from inanimate machines; but that he actually hath done so, they have not the least tendency to prove. In the second place, the Cartesian argument is insufficient, because it hath no limits, and knows not where to stop; as, by the same method of arguing, every man might prove his neighbour to be an inanimate machine: for though every individual be conscious of his own thoughts, he is not so of those of his neighbours; and it no more exceeds the power of God to cause an inanimate machine perform the actions of a man than those of a beast. Neither are the two objections which the hypothesis is calculated to answer, to be at all admitted as arguments in its favour. They are, 1. That if we allow brutes to have souls, they must be immaterial, and consequently immortal; and, 2. It seems a contradiction to the goodness of God to think that he should subject innocent creatures to such a multitude of evils as we see the brute creation endure in this world. The first of these is productive of no bad consequences to us, though it should be granted: and if it is supposed that the brute creatures are really immortal, the second objection vanishes; because, in the enjoyment of endless felicity, all temporary afflictions, how severe soever, must be swallowed up as though they had never been.

As to a positive proof on the other side, viz. that brutes are really endowed with sensation and consciousness, there is undoubtedly the same evidence for the sensibility of brutes that there is for that of mankind. We see brutes avoid pain as much as we do; and we likewise see them seek for pleasure and express their happiness in the enjoyment of certain things by signs not at all equivocal. Therefore, though we grant the possibility of all this being the effect of mere mechanism; yet, as we are conscious that in ourselves similar effects are produced by a sentient principle, we have all the reason in the world to conclude that in brutes they are likewise derived from a principle of sensation: especially seeing we know of no kind of mechanism in any other part of nature that produces any thing like the effects just mentioned; and until we see that a mechanism of this kind does take place in some part of nature, we have no right to suppose it in any. As to those actions of the human body in which it seems to move spontaneously, like an automaton, without the direction of the mind or will, it is almost superfluous to observe, that they were not performed in this manner originally, but required very great exertions of the will and intellectual faculty before the body could be brought to perform them easily; so that from this nothing can be inferred. Add to this, that divine revelation sets forth to us in many

places the brute creation as objects of mercy; which could not be done without the highest absurdity, if they were not really capable of feeling pleasure and pain as well as we.

The most rational opposers of the Cartesian scheme maintain, that brutes are endowed with a principle of sensation as well as we; though of an inferior nature to ours. Great disputes, however, have arisen on this subject; some maintaining, that the soul of brutes is merely sensitive, and that they are altogether destitute of reflection and understanding; others, that they not only reason, but make a better use of it than men do. That the brutes are endowed only with sensation, and totally destitute of all power of reflection, or even reasoning, is what can by no means be maintained on good grounds: neither can it be asserted that they act entirely from instinct, or a blind propensity to certain things, without knowing why or wherefore. In numberless instances, needless to be mentioned here, but which will readily occur to every reader, it is evident, that education will get the better of many of the natural instincts of brutes; which could never be the case were they absolutely incapable of reasoning. On the other hand, it is equally certain, that they are by no means capable of education in the same degree that men are; neither are the rational exertions of beasts at all to be compared even with those of the meanest savages. One remarkable instance of this is in the use of the element of fire. The most savage nations have known how to make this element subservient to their purposes; or if some have been found who have been entirely ignorant of its existence, they have quickly learned its uses on seeing it made use of by others: but though many of the brute creatures are delighted with warmth, and have opportunities every day of seeing how fire is supplied with fuel, and by that means preserved, it never was known that one of them attempted to preserve a fire by this means. This shows a strange defect of rationality, unaccountable upon any other supposition than that the soul or sentient principle of brutes is some how or other inferior in its nature to that of man; but still it is a sentient principle, capable of perceptions as quick, and in many instances much more so than our own.

Father Bougeant supports his opinion of the spirits of brute creatures being devils in the following manner: Having proved at large that beasts naturally have understanding, "Reason (says he) naturally inclines us to believe that beasts have a spiritual soul; and the only thing that opposes this sentiment is, the consequences that might be inferred from it. If brutes have a soul, that soul must be either matter or spirit; it must be one of the two, and yet you dare affirm neither. You dare not say it is matter, because you must then necessarily suppose matter to be capable of thinking; nor will you say that it is spirit, this opinion bringing with it consequences contrary to the principles of religion; and this, among others, that man would differ from beasts only by the degrees of plus and minus; which would demolish the very foundation of all religion. Therefore, if I can elude all these consequences; if I can assign to beasts a spiritual soul, without striking at the doctrines of religion; it is evident, that my system, being moreover the most agreeable to reason,

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is the only warrantable hypothesis. Now I shall, and can do it, with the greatest ease imaginable. I even have means, by the same method, to explain many very obscure passages in the Holy Scripture, and to resolve some very great difficulties which are not well confuted. This we shall unfold in a more particular manner.

“ Religion teaches us, that the devils, from the very moment they had sinned, were reprobate, and that they were doomed to burn for ever in hell; but the church has not yet determined whether they do actually endure the torments to which they are condemned. It may then be thought that they do not yet suffer them, and that the execution of the verdict brought against them is reserved for the day of the final judgment.—Now what I pretend to infer from hence is, that, till doomsday comes, God, in order not so suffer so many legions of reprobate spirits to be of no use, has distributed them through the several spaces of the world, to serve the designs of his Providence, and make his omnipotence to appear. Some, continuing in their natural state, busy themselves in tempting men, in seducing and tormenting them; either immediately, as Job’s devil, and those that lay hold of human bodies; or by the ministry of forcerers or phantoms. These wicked spirits are those whom the scripture calls the *powers of darkness*, or the *powers of the air*. God, with the others, makes millions of beasts of all kinds, which serve for the uses of men, which fill the universe, and cause the wisdom and omnipotence of the Creator to be admired. By that means I can easily conceive, on the one hand, how the devils can tempt us; and on the other, how beasts can think, know, have sentiments, and a spiritual soul, without any way striking at the doctrines of religion, I am no longer surprised to see them have forecast, memory, and judgment. I should rather have occasion to wonder at their having no more, since their soul very likely is more perfect than ours. But I discover the reason of this: it is because, in beasts as well as in ourselves, the operations of the mind are dependent on the material organs of the machine to which it is united; and those organs being grosser and less perfect than in us, it follows, that the knowledge, the thoughts, and the other spiritual operations of the beasts, must of course be less perfect than ours: And if these proud spirits know their own dismal state, what an humiliation must it be to them thus to see themselves reduced to the condition of beasts! But, whether they know it or no, so shameful a degradation is still, with regard to them, the primary effect of the divine vengeance I just mentioned; it is an anticipated hell.”

Having mentioned the prejudices against this hypothesis, such particularly as the pleasure which people of sense and religion take in beasts and birds, especially all sorts of domestic animals; he proceeds, “ Do we love beasts for their own sakes? No. As they are altogether strangers to human society, they can have no other appointment but that of being useful and amusing. And what care we whether it be a devil or any other creature that amuses us? The thought of it, far from shocking, pleases me mightily. I with gratitude admire the goodness of the Creator, who gave me so many little devils to serve and amuse me.

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If I am told that these poor devils are doomed to suffer eternal tortures, I admire God’s decrees, but I have no manner of share in that dreadful sentence; I leave the execution of it to the sovereign judge; and, notwithstanding this, I live with my little devils as I do with a multitude of people, of whom religion informs me that a great number shall be damned. But the cure of a prejudice is not to be effected in a moment; it is done by time and reflection: give me leave then lightly to touch upon this difficulty, in order to observe a very important thing to you.

“ Persuaded as we are that beasts have intelligence, have we not all of us a thousand times pitied them for the excessive evils which the majority of them are exposed to, and in reality suffer? How unhappy is the condition of horses! we are apt to say upon seeing a horse whom an unmerciful carman is murdering with blows. How miserable is a dog whom they are breaking for hunting! How dismal is the fate of beasts living in woods! they are perpetually exposed to the injuries of the weather; always seized with apprehensions of becoming the prey of hunters, or of some wilder animal; for ever obliged, after long fatigue, to look out for some poor insipid food; often suffering cruel hunger; and subject, moreover, to illness and death! If men are subject to a multitude of miseries that overwhelm them, religion acquaints us with the reason of it; viz. the being born sinners. But what crimes can beasts have committed by birth to be subject to evils so very cruel? What are we, then, to think of the horrible excesses of miseries undergone by beasts? miseries, indeed, far greater than those endured by men. This is, in any other system, an incomprehensible mystery; whereas nothing is more easy to be conceived from the system I propose. The rebellious spirits deserve a punishment still more rigorous, and happy it is for them that their punishment is deferred. In a word, God’s goodness is vindicated, man himself is justified: for what right can we have, without necessity, and often in the way of mere diversion, to take away the life of millions of beasts if God had not authorised us so to do? And beasts being as sensible as ourselves of pain and death, how could a just and merciful God have given man that privilege, if they were not so many guilty victims of the divine vengeance?

“ But hear still something more convincing, and of greater consequence: beasts, by nature, are extremely vicious. We know well that they never sin, because they are not free; but this is the only condition wanting to make them sinners. The voracious birds and beasts of prey are cruel. Many insects of one and the same species devour one another. Cats are perfidious and ungrateful; monkeys are mischievous; and dogs envious. All beasts in general are jealous and revengeful to excess; not to mention many other vices we observe in them: and at the same time that they are by nature so very vicious, they have, say we, neither the liberty nor any helps to resist the bias that hurries them into so many bad actions. They are, according to the schools, necessitated to do evil, to disconcert the general order, to commit whatever is most contrary to the notion we have of natural justice and to the principles of virtue. What monsters are these in a world originally created for order and justice to reign

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reign in? This is, in good part, what formerly persuaded the Manicheans, that there were of necessity two orders of things, one good, and the other bad; and that the beasts were not the work of the good principle: a monstrous error! But how then shall we believe that beasts came out of the hands of their Creator with qualities so very strange! If man is so very wicked and corrupt, it is because he has himself through sin perverted the happy nature God had given him at his creation. Of two things, then, we must say one: either that God has taken delight in making beasts so vicious as they are, and of giving us in them models of what is most shameful in the world; or that they have, like man, original sin, which has perverted their primitive nature.

"The first of these propositions finds very difficult access to the mind, and is an express contradiction to the holy scriptures; which say, that whatever came out of God's hands, at the time of the creation of the world, was good, yea very good. What good can there be in a monkey's being so very mischievous, a dog so full of envy, a cat so malicious? But then many authors have pretended, that beasts, before man's fall, were different from what they are now; and that it was in order to punish man that they became so wicked. But this opinion is a mere supposition of which there is not the least footstep in Holy Scripture. It is a pitiful subterfuge to elude a real difficulty: this at most might be said of the beasts with whom man has a sort of correspondence; but not at all of the birds, fishes, and insects, which have no manner of relation to him. We must then have recourse to the second proposition, That the nature of beasts has, like that of man, been corrupted by some original sin: Another hypothesis, void of foundation, and equally inconsistent with reason and religion, in all the systems which have been hitherto espoused concerning the souls of beasts. What party are we to take? Why, admit of my system, and all is explained. The souls of beasts are refractory spirits which have made themselves guilty towards God. The sin in beasts is no original sin; it is a personal crime, which has corrupted and perverted their nature in its whole substance; hence all the vices and corruption we observe in them, though they can be no longer criminal, because God, by irrecoverably reprobating them, has at the same time divested them of their liberty."

These quotations contain the strength of father Bougeant's hypothesis, which also hath had its followers; but the reply to it is obvious. Beasts, though remarkably mischievous, are not completely so; they are in many instances capable of gratitude and love, which devils cannot possibly be. The very same passions that are in the brutes exist in the human nature; and if we chose to argue from the existence of those passions, and the ascendancy they have over mankind at some times, we may say with as great justice, that the souls of men are devils, as that the souls of brutes are. All that can be reasonably inferred from the greater prevalence of the malignant passions among the brutes than among men, is, that the former have less rationality than men: and accordingly it is found, that among savages, who exercise their reason less than other men, every species of barbarity is practised, without being deemed a crime.

Brute.

On the present subject there is a very ingenious treatise in German, published by the late professor Bergman, under the title (as translated) of "Researches designed to show what the Brute Animals certainly *are not*, and also what they probably *are*."—That they are *not* machines, he proves with more detail than seemed necessary for refuting a hypothesis which would equally tend to make *us all* machines. It is certain, that the *half-reasoning* elephant cannot be deemed a machine, by us, from any other consideration, than that *he* goes upon four feet, while *we* go upon two; and he might as well take us for mere machines because *we* go upon two feet, while *he* goes upon four.

But if animals are not mere machines, what *are* they? Manifestly sensitive beings, with an immaterial principle; and thinking or reasoning beings, to a *certain degree*. In certain classes of animals this appears evident to our author, who seems to have observed with great sagacity and attention their various operations and proceedings, their ways and means, &c. He thinks it impossible to deduce this variety of action, in any animals (if we except those of the lowest classes in the gradation of intelligence), from a general and uniform instinct. For they accommodate their operations to times and circumstances. They combine; they choose the favourable moment; they avail themselves of the occasion, and seem to receive instruction by experience. Many of their operations announce reflection: the bird repairs a shattered nest, instead of constructing instinctively a new one: the hen, who has been robbed of her eggs, changes her place in order to lay the remainder with more security: the cat discovers both care and artifice in concealing her kittens. Again, it is evident, that, on many occasions, animals know their faults and mistakes, and correct them; they sometimes contrive the most ingenious methods of obtaining their ends, and when one method fails have recourse to another; and they have, without doubt, a kind of language for the mutual communication of their ideas. How is all this to be accounted for (says our author), unless we suppose them endow'd with the powers of perceiving, thinking, remembering, comparing, and judging? They have these powers, indeed, in a degree inferior to that in which they are possessed by the human species, and form classes below them in the graduated scale of intelligent beings. But still it seems to our author unreasonable to exclude them from the place which the principles of sound philosophy, and facts ascertained by constant observation, assign to them in the great and diversified sphere of life, sensation, and intelligence;—he does not, however, consider them as beings whose actions are directed to *moral* ends, nor consequently as accountable and proper subjects for *reward* or *punishment* in a future world.

That brute animals possess reflection and sentiment, and are susceptible of the kindly as well as the irascible passions, independently of sexual attachment and natural affection, is evident from the numerous instances of affection and gratitude daily observable in different animals, particularly the dog. Of those and other sentiments, such as pride, and even a sense of glory, the elephant exhibits proofs equally surprising and indubitable,

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table, as the reader may see under the article ELEPHAS.

White's Natural History
of Selborne.

As to the natural affection of brutes, says an ingenious writer, "the more I reflect on it the more I am astonished at its effects. Nor is the violence of this affection more wonderful than the shortness of its duration. Thus every hen is in her turn the virago of the yard, in proportion to the helplessness of her brood; and will fly in the face of a dog or a sow in defence of those chickens which in a few weeks she will drive before her with relentless cruelty. This affection sublimates the passions, quickens the invention, and sharpens the sagacity of the brute creation. Thus an hen, just become a mother, is no longer that placid bird she used to be, but with feathers standing on end, wings hovering, and clucking note, she runs about like one possessed. Dams will throw themselves in the way of the greatest danger in order to avert it from their progeny. Thus a partridge will tumble along before a sportsman, in order to draw away the dogs from her helpless covey. In the time of nidification the most feeble birds will assault the most rapacious. All the hirundines of a village are up in arms at the sight of an hawk, whom they will persecute till he leaves that district. A very exact observer has often remarked, that a pair of ravens nestling in the rock of Gibraltar would suffer no vulture or eagle to rest near their station, but would drive them from the hill with an amazing fury: even the blue-thrush at the season of breeding would dart out from the clefts of the rocks to chase away the kestrel or the sparrow-hawk. If you stand near the nest of a bird that has young, she will not be induced to betray them by an inadvertent fondness, but will wait about at a distance with meat in her mouth for an hour together. The flycatcher builds every year in the vines that grow on the walls of my house. A pair of these little birds had one year inadvertently placed their nest on a naked bough, perhaps in a shady time, not being aware of the inconvenience that followed: but an hot sunny season coming on before the brood was half fledged, the reflection of the wall became insupportable, and must inevitably have destroyed the tender young, had not affection suggested an expedient, and prompted the parent-birds to hover over the nest all the hotter hours, while with wings expanded and mouths gaping for breath they screened off the heat for their suffering offspring. A farther instance I once saw of notable sagacity in a willow-wren, which had built in a bank in my fields. This bird a friend and myself had observed as she sat in her nest; but were particularly careful not to disturb her, though we saw she eyed us with some degree of jealousy. Some days after, as we passed that way, we were desirous of remarking how this brood went on; but no nest could be found, till I happened to take up a large bundle of long green moss as it were carelessly thrown over the nest, in order to dodge the eye of any impertinent intruder."

A wonderful spirit of sociality in the brute creation, independent of sexual attachment, has been frequently remarked. Many horses, though quiet with company, will not stay one minute in a field by themselves: the strongest fences cannot restrain them. A horse has been known to leap out at a stable window through which dung was thrown after company; and yet in other

respects is remarkably quiet. Oxen and cows will not fatten by themselves; but will neglect the finest pasture that is not recommended by society. It would be needless to instance in sheep, which constantly flock together. But this propensity seems not to be confined to animals of the same species. In the work last quoted, we are told of "a doe still alive, that was brought up from a little fawn with a dairy of cows; with them it goes a-field, and with them it returns to the yard. The dogs of the house take no notice of this deer, being used to her; but if strange dogs come by, a chase ensues; while the master smiles to see his favourite securely leading her pursuers over hedge, or gate, or stile, till she returns to the cows, who with fierce lowings and menacing horns drive the assailants quite out of the pasture."

Even great disparity of kind and size does not always prevent social advances and mutual fellowship. Of this the following remarkable instance is given in the same work: "A very intelligent and observant person has assured me, that in the former part of his life, keeping but one horse, he happened also on a time to have but one solitary hen. These two incongruous animals spent much of their time together in a lonely orchard, where they saw no creature but each other. By degrees an apparent regard began to take place between these two sequestered individuals. The fowl would approach the quadruped with notes of complacency, rubbing herself gently against his legs; while the horse would look down with satisfaction, and move with the greatest caution and circumspection, lest he should trample on his diminutive companion. Thus by mutual good offices each seemed to console the vacant hours of the other; so that Milton, when he puts the following sentiment in the mouth of Adam, seems to be somewhat mistaken:

Much less can bird with beast, or fish with fowl,
So well converse, nor with the ox the ape.

In the Gentleman's Magazine for March 1788 we have the following anecdotes of a raven, communicated by a correspondent who does not sign his name, but who says it is at the service of the doubtful. The raven alluded to "lives, or did live three years since, at the red lion at Hungerford; his name, I think, is *Rafe*. You must know then, that coming into that inn, my chaise run over or bruised the leg of my Newfoundland dog; and while we were examining the injury done to the dog's foot, *Rafe* was evidently a concerned spectator; for the minute the dog was tied up under the manger with my horse, *Rafe* not only visited but fetched him bones, and attended upon him with particular and repeated marks of kindness. The bird's notice of the dog was so marked, that I observed it to the hostler; for I had not heard a word before of the history of this benevolent creature. John then told me, that he had been bred from his pin-feather in intimacy with a dog; that the affection between them was mutual; and that all the neighbourhood had often been witnesses of the innumerable acts of kindness they had conferred upon each other. *Rafe's* poor dog, after a while, unfortunately broke his leg; and during the long time he was confined, *Rafe* waited upon him constantly, carried him his provisions daily, and never scarce left him alone! One night by accident the hostler had

shut

Brute.

shut the stable door, and Rafe was deprived of the company of his friend the whole night; but the hostler found in the morning the bottom of the door so pecked away, that had it not been opened, Rafe would in another hour have made his own entrance-port. I then enquired of my landlady (a sensible woman), and heard what I have related confirmed by her with several other singular traits of the kindnesses this bird shows to all dogs in general, but particularly to maimed or wounded ones. I hope and believe, however, the bird is still living; and the traveller will find I have not over-rated this wonderful bird's merit."

To these instances of attachment between incongruous animals from a spirit of sociability or the feelings of sympathy, may be added the following instance of fondness from a different motive, recounted by Mr White in the work already so frequently quoted. "My friend had a little helpless leveret brought to him, which the servants fed with milk in a spoon; and about the same time his cat kittened, and the young were dispatched and buried. The hare was soon lost, and supposed to be gone the way of most foundlings, or to be killed by some dog or cat. However, in about a fortnight, as the master was sitting in his garden in the dusk of the evening, he observed his cat, with tail erect, trotting towards him, and calling with little short inward notes of complacency, such as they use towards their kittens, and something gambling after, which proved to be the leveret which the cat had supported with her milk, and continued to support with great affection. Thus was a graminivorous animal nurtured by a carnivorous and predaceous one!

"Why so cruel and sanguinary a beast as a cat, of the ferocious genus of *Felis*, the *murium leo*, as Linnaeus calls it, should be affected with any tenderness towards an animal which is its natural prey, is not so easy to determine. This strange affection probably was occasioned by that desiderium, those tender maternal feelings, which the loss of her kittens had awakened in her breast; and by the complacency and ease she derived to herself from the procuring her teats to be drawn, which were too much distended with milk, till from habit she became as much delighted with this foundling as if it had been her real offspring.

"This incident is no bad solution of that strange circumstance which grave historians as well as the poets assert, of exposed children being sometimes nurtured by female wild beasts that probably had lost their young. For it is not one whit more marvellous that Romulus and Remus, in their infant state, should be nursed by a she-wolf, than that a poor little sucking leveret should be fostered and cherished by a bloody grimalkin.

——— *Viridi fatam Mavortis in antro
Procubuisse lupam: geminos huic ubera circum
Ludere pendentes pueros, et lambere matrem
Impavidos: illam tereti cervice reflexam
Mulcere alternos, et corpora fingere lingua."*

But besides the different qualities enumerated, besides reflection and sagacity often in an astonishing degree, and besides the sentiments and actions prompted by social or natural attachments, certain brutes seem on many occasions inspired with a superior faculty, a kind of presentiment or second-sight as it were, with regard to events and designs altogether unforeseen by

the rational beings whom they concern. Of the faculty alluded to, various instances will probably consist with the knowledge or the recollection of most of our readers: We shall therefore only recite the following on account of its unquestionable authenticity. At the seat of the late earl of Lichfield, three miles from Blenheim, there is a portrait in the dining-room of Sir Henry Lee, by Johnston, with that of a mastiff dog which saved his life. It seems a servant had formed the design of assassinating his master and robbing the house; but the night he had fixed on, the dog, which had never been much noticed by Sir Henry, for the first time followed him up stairs, got under his bed, and could not be got from thence by either master or man: in the dead of night, the same servant entered the room to execute his horrid design; but was instantly seized by the dog, and being secured confessed his intentions. There are ten quaint lines in one corner of the picture, which conclude thus:

But in my dog, whereof I made no store,
I find more love than those I trusted more.

Upon what hypothesis can we account for a degree of foresight and penetration such as this? Or will it be suggested, as a solution of the difficulty, that a dog may possibly become capable in great measure of understanding human discourse, and of reasoning and acting accordingly; and that, in the present instance, the villain had either uttered his design in soliloquy, or imparted it to an accomplice, in the hearing of the animal?

It has been much disputed whether the brutes have any language whereby they can express their minds to each other; or whether all the noise they make consists only of cries inarticulate, and unintelligible even to themselves. We are, however, too little acquainted with the intellectual faculties of these creatures to be able to determine this point. Certain it is, that their passions, when excited, are generally productive of some peculiar cry; but whether this be designed as an expression of the passion to others, or only a mechanical motion of the muscles of the larynx occasioned by the passion, is what we have no means of knowing. We may indeed, from analogy, conclude, with great reason, that some of the cries of beasts are really expressions of their sentiments; but whether one beast is capable of forming a design, and communicating that design by any kind of language to others, is what we submit to the judgment of the reader, after giving the following instance which among others is brought as a proof of it by father Bougeant. "A sparrow finding a nest that a martin had just built, standing very conveniently for him, possessed himself of it. The martin, seeing the usurper in her house, called for help to expel him. A thousand martins came full speed, and attacked the sparrow; but the latter being covered on every side, and presenting only his large beak at the entrance of the nest, was invulnerable, and made the boldest of them who durst approach him repent of their temerity. After a quarter of an hour's combat, all the martins disappeared. The sparrow thought he had got the better, and the spectators judged that the martins had abandoned their undertaking. Not in the least. Immediately they returned to the charge; and each of them having procured a little of that tempered earth

Brute.

Bruttii
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Brutus.

earth with which they make their nests, they all at once fell upon the sparrow, and inclosed him in the nest to perish there, though they could not drive him thence. Can it be imagined that the martins could have been able to hatch and concert this design all of them together, without speaking to each other, or without some medium of communication equivalent to language?"

BRUTTII (anc. geog.), one of the two peninsulas of Italy, the ancient Calabria being the other; stretching to the south towards Sicily; bounded by the sea on every side except by the isthmus, between the river Laus and the Thurii, where it is terminated by Lucania; inhabited by the Bruttii, for whose country the ancient Romans had no peculiar name, calling both the people and the country indiscriminately *Bruttii*. This and a part of Lucania was the ancient Italia, (Stephanus). It was called *Bdellia*, which in Greek signifies *pitch*, from the great quantity of it produced there, (Bochart). It is divided into two coasts by the Apennine; that on the Tuscan and that on the Ionian Sea. Now called *Calabria Ultra*. Different from the ancient Calabria or Messapia, to the east on the Adriatic or Ionian sea, and which formed the other peninsula or heel of the leg, now called *Calabria Citra*, the Bruttii forming the foot.

BRUTTON, a town of Somersetshire, in England. It is situated on the river Brew; and is a good place, and well inhabited. It is adorned with a very beautiful church; has a free school, founded by Edward I; and the alms-house or hospital is so good, that it has the appearance of a college. They have a woollen manufactory of cloth and ferges, and they are likewise noted for their malt. W. Long. 2. 30. N. Lat. 51. 15.

BRUTUS, or BRUTE, according to the old exploded history of this country by Geoffroy of Monmouth, was the first king of Britain. He is said to have been the son of Sylvius, and he of Ascanius the son of Æneas, and born in Italy: killing his father by chance, he fled into Greece, where he took king Pandrusus prisoner, who kept the Trojans in slavery, whom he released on condition of providing ships, &c. for the Trojans to forsake the land. Being advised by the oracle to sail west beyond Gaul, he, after some adventures, landed at Totness in Devonshire. Albion was then inhabited by a remnant of giants, whom Brutus destroyed; and called the island, after his own name, *Britain*. He built a city called *New Troy*, since London; and having reigned here 24 years, at his death parcelled the island among his three sons: Lochrine had the middle, called *Loegria*; Camber had Wales, and Albanact Scotland.

BRUTUS (Lucius Junius), the avenger of the rape of Lucretia, and founder of the Roman republic, flourished 509 years before Christ. See (*History of*) ROME.

BRUTUS (Marcus), the passionate lover of his country, and chief conspirator against Cæsar, slew himself on losing the battle of Philippi, 42 years before Christ. See (*History of*) ROME.

BRUTUS (John Michael), a man of learning, and a polite writer, in the 16th century. He was a native of Venice; and, having studied at Padua, spent great part of his life in travelling, and became historiographer to his imperial majesty. He wrote, 1. A history

of Hungary. 2. A history of Florence. 3. Notes on Horace, Cæsar, Cicero, &c.; and other works. He was living in the year 1590.

BRUTUS (Stephen Junius), the disguised author of a political work intitled *Vindicie contra tyrannos*. See LANGUET.

BRUYERE (John de la), a celebrated French author, was born at Dourdan in the year 1664. He wrote *Characters*, describing the manners of his age, in imitation of Theophrastus; which characters were not always imaginary or general, but descriptive, as was well known, of persons of considerable rank. In the year 1693, he was by an order of the king chosen a member of the French Academy; and died in the year 1696.—“The *Characters of Bruyere* (says Voltaire) may justly be ranked among the extraordinary productions of this age. Antiquity furnishes no examples of such a work. A style rapid, concise, and nervous; expressions animated and picturesque; an use of language altogether new, without offending against its established rules, struck the public at first; and the allusions, which are crowded in almost every page, completed its success. When La Bruyere showed his work in manuscript to Malesieux, this last told him, that the book would have many readers, and its author many enemies. It somewhat sunk in the opinion of men, when that whole generation whose follies it attacked were passed away; yet as it contains many things applicable to all times and places, it is more than probable that it will never be forgotten.”

BRUYIERS, a town of Lorraine in Vosque, with a provostship. E. Long. 6. 45. N. Lat. 48. 15.

BRYANS BRIDGE, a town of Ireland, in the county of Clare and province of Connaught, seated on the river Shannon, eight miles north of Limeric. W. Long. 8. 30. N. Lat. 52. 31.

BRYANT (Sir Francis), a soldier, statesman, and a poet of no inconsiderable fame in his time, was born of a genteel family, educated at Oxford, and afterwards spent some time in travelling abroad. In the year 1522, the 14th of Henry VIII. he attended in a military capacity, the earl of Surrey on his expedition to the coast of Brittany; and commanded the troops in the attack of the town of Morlaix, which he took and burnt. For this service he was knighted on the spot by the earl. In 1528, he was in Spain; but on what service is doubtful. In 1529, he was sent ambassador to France; and, the year following, to Rome on account of the king's divorce. He had also been there in 1522, in the same capacity, when cardinal Woolsey's election to the holy see was in agitation. He was gentleman of the privy chamber to king Henry VIII. and to his successor Edward VI. in the beginning of whose reign he marched with the protector against the Scots; and after the battle of Muffelburgh, in which he commanded the light horse, was made banneret. In 1548, he was appointed chief governor of Ireland, where he married the countess of Ormond. He died soon after, and was buried at Waterford. He wrote, 1. Songs and Sonnets; some of which were printed with those of the earl of Surrey and Sir Thomas Wyatt. Lond. 1565. 2. Letters written from Rome concerning the king's divorce; manuscript. 3. Various letters of state; which Ant. Wood says he had seen. 4. A dispraise of the life of a court-

Brutus
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Bryant.

Brye
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Bryonia.

courtier, &c. Lond. 1548, 8vo, from the French of Alaygri, who translated it from the Castilian language, in which it was originally written by Guevara.

BRYE (John Theodore de), an excellent engraver, was a native of Liege; but he resided chiefly at Franckfort, where he carried on a considerable commerce in prints. It does not appear when he was born, nor to what master he owed his instructions in the art of designing and engraving. He worked almost entirely with the graver, and seldom called in the assistance of the point. He acquired a neat, free style of engraving, excellently well adapted to small subjects, in which many figures were to be represented; as *funeral parades, processions*, and the like, which he executed in a charming manner. He also drew very correctly. His heads in general are spirited and expressive, and the other extremity of his figures well marked. His back-grounds, though frequently very slight, are touched with a masterly hand. He died, as his sons inform us in the third part of Boissard's collection of portraits, on March 27th, 1598; the two first parts of which collection were engraved by himself, assisted by his sons, who afterwards continued it.

BRYENNIUS (Manuel), a Greek writer on music, is supposed to have flourished under the elder Paleologus, viz. about the year of Christ 1120. He wrote three books on Harmonics; the first whereof is a kind of commentary on Euclid, as the second and third are on Ptolemy. He professes to have studied perspicuity for the sake of young men. Meibomius had given the public expectations of a translation of this work: but not living to complete it, Dr Wallis undertook it; and it now makes a part of the third volume of his works, published at Oxford in three volumes folio, 1699.

BRYENNIUS (Nicephorus), a prince distinguished by his courage, probity, and learning, was born at Orestia in Macedonia; where his father by rebellion provoked the emperor to send his general Alexis Comnenus against him, who ordered his eyes to be pulled out; but being charmed with his son Bryennius, he married him to Anne Comnenus his daughter, so famous by her writings. When Alexis came to the throne, he gave Bryennius the title of *Cesar*; but would not declare him his successor, though solicited to it by the empress Irene; and was therefore succeeded by his son John Comnenus, to whom Bryennius behaved with the utmost fidelity. Being sent, about the year 1137, to besiege Antioch, he fell sick; and, returning, died at Constantinople. This prince wrote the *History of Alexis Comnenus*, which he composed at the request of his mother-in-law the empress Irene.

BRYGMUS, among physicians, a grating noise made by the gnashing of the teeth.

BRYONIA, BRYONY: A genus of the syngenesia order, belonging to the monœcia class of plants; and in the natural method ranking under the 34th order, *Cucurbitaceæ*. The calyx of the male is five-toothed, with a quinquefid corolla, and three filaments. In the female the calyx is dentated, the corolla quinquefid, the style trifid, with a roundish many-seeded berry.

Species. 1. The alba, rough, or white bryony with red flowers, is a native of dry banks under hedges in many parts of Britain. The roots of this plant have by impostors been brought into a human shape, and shown for mandrakes. The method practised by these

people was to find a young thriving plant of bryony; then they opened the earth all round, being careful not to disturb the lower fibres; and being provided with such a mould as is used for making plaster figures, they fixed the mould close to the root, fastening it with wire to keep it in its proper situation: then they filled the earth about the root, leaving it to grow to the shape of the mould; which in one summer it will do; so that if this is done in March, by September it will have the shape. The leaves of this plant are also imposed on people for mandrake-leaves; although there is no resemblance between them, nor any agreement in quality. 2. The africana, or African tuberous rooted bryony. 3. The racemosa, or bryony with a red olive-shaped fruit. These are natives of warm climates; and are perennial; but their branches decay every winter. They flower in July, and in warm summers will perfect their seeds in Britain. 4. The cretica, or spotted bryony of Crete. 5. The variegata, or American bryony with a variegated fruit. 6. The bonariensis, or bryony with hairy palmated leaves, divided into five parts, and obtuse segments. These are likewise natives of warm countries; but merit cultivation on account of the pretty appearance they make when the plants are full of fruit.

Culture. The second and third sorts are to be planted in pots filled with fresh light earth; and in winter must be placed in the green-house to protect them from frosts and great rains, which would destroy them if they were exposed thereto. In summer, they may be exposed to the open air, and must be frequently refreshed with water in dry weather. The three last sorts are annual plants; they must be raised on a hot-bed early in the spring; and when the plants are about three inches high, they should be each transplanted into a small pot, and plunged into a hot-bed of tanner's bark. When the plants are grown so large as to ramble about on the surface of the bed, and begin to entangle with other plants, they should be shifted into larger pots, and placed in the bark-stove; where their branches may be trained to the wall, or against an espalier, that they may have sun and air, which is absolutely necessary for their producing fruit.

Medicinal Uses, &c. The roots of the first species are used in medicine. These are very large, sometimes as thick as a man's thigh: their smell, when fresh, is strong and disagreeable; the taste nauseously bitter, acrid, and biting; the juice is so sharp, as in a little time to excoriate the skin; in drying, they lose great part of their acrimony, and almost their whole scent.—Bryony-root is a strong irritating cathartic; and as such has sometimes been successfully exhibited in maniacal cases, in some kinds of dropries, and in several chronical disorders, where a quick solution of viscid juices and a sudden stimulus on the solids were required. An extract prepared by water acts more mildly, and with greater safety, than the root in substance: given from half a dram to a dram, it is said to prove a gentle purgative, and likewise to operate powerfully by urine.—Bryony-root, applied externally, is said to be a powerful discutient.

Black BRYONY. See TAMUS.

BRYUM, in botany: A genus of the 56th natural order, viz. *Musci*, belonging to the cryptogamia class of plants. The anthera is operculated or covered with a lid, the calyptra polished; and there is a filament arising

Bryonia,
Bryum.

Bua
Bubastis.

from the terminal tubercle. There are 41 species, most of them natives of Britain.

BUA, an island of the gulph of Venice, on the coast of Dalmatia, near the town of Trau; called likewise the *Partridge island*, because frequented by those birds. It is called *Bubus* by Pliny. In the times of the decay of the empire it was called *Boas*; and several illustrious men that fell under disgrace at court were banished to this island; among whom were Florentius, master of the offices of the emperor Julian, Immentius, de Valenti, and the heretic Jovinian. The emperors of Constantinople either were not much acquainted with this pretended Siberia, or were willing to treat the banished with great clemency. It is certain that the climate of this island is exceeding mild; the air perfectly good; the oil, grapes, and fruit excellent; and the sea around it abounds in fish, and the port is large and secure. Neither is it so small that a man has not room to walk and ride about as much as he pleases; for it is ten miles in length, and about twenty-five in circuit; nor can it be said to be rugged, though rather high and mountainous.

BUANES, a town of France, in Gascony, and in the diocese of Aire, seated on the river Bahus, in E. Long. 0. 5. N. Lat. 43. 47.

BUARCOS, a town of Portugal, in the province of Beira. W. Long. 8. 5. N. Lat. 40. 3.

BUBALIS, in zoology, the trivial name of the buffalo, a species of the bos. See Bos.

BUBASTIS, in the Egyptian mythology, one of the names of Isis or the moon. The Egyptians bestowed different names on the sun, either to characterize his effects or his relations with respect to the earth; they followed the same method respecting the moon. Chæremon, a sacred writer of Egypt, leaves no doubt on this subject. "Every thing which is published of Osiris and Isis, all the sacerdotal fables, allude only to the phases of the moon, and the course of the sun." Bubastis was one of the principal attributes of Isis. Theology having personified her, formed of her a divinity, in whose honour a city of that name was built, as described by Herodotus, and where the people collected from all parts of Egypt, at a certain period of the year. A cat was the symbol of this deity. The priests fed it with sacred food; and when it died, they embalmed its body, and carried it in pomp to the tomb prepared for it. The ancients have explained this worship variously. The Greeks pretend that when Typhon declared war against the gods, Apollo transformed himself into a vulture, Mercury into an ibis, and Bubastis into a cat, and that the veneration of the people for the latter animal took rise from that fable; but they ascribe their own ideas to the Egyptians, who thought very differently. However that may be, the cat was greatly honoured in Egypt, and a Roman soldier having imprudently killed one, was immediately put to death by the populace.

Bubastis, in the language of the priests, was deemed the daughter of Isis, and even represented her in certain circumstances. It is for this reason that the Greeks, who honoured the moon by the name of *Diana*, bestowed it also on this Egyptian divinity. Bubastis, says Herodotus, is called *Diana* by the Greeks. The Egyptians attributed to her the virtue of assisting pregnant women. The Greeks and Latins, disciples of

the Egyptians, ascribed the same power to Diana; and Horace does not think it unworthy of his pen to address the following strophe to her:

*Montium custos nemorumque, Virgo,
Quæ laborantes utero puellas
Ter vocata audis, adimisque letbo,
Diva Triformis.*

The philosopher will seek for the origin of this ancient worship in the laws imposed by nature on women, and which in some measure follow the lunar revolutions. The natural philosophers and the poets buried it under allegories unintelligible to the people.

A perfect resemblance, however, does not exist between the two deities we have been speaking of. The Greeks constituted Diana goddess of the chase and of the forests; an attribute the Egyptians did not acknowledge in Bubastis. The former added, that she was the daughter of Jupiter and Latona, and Bubastis was produced by Osiris and Isis.

A barbarous custom was introduced at the festivals celebrated in honour of Bubastis, called by the Greeks also *Ilithyia* or *Lucina*, to mark her presiding over childbirth. The Egyptians adored her under this name in the city of Ilithyia, situated near Latopolis.

It remains to resolve a question which naturally arises here: How could Bubastis be called the daughter of Isis, since she also was a symbol of the moon? The Egyptian theology easily explains these apparent contradictions. Isis was the general appellation of the moon, Bubastis a particular attribute. The sun, in conjunction with the star of the night, formed the celestial marriage of Osiris and Isis; the crescent which appears three days after was allegorically called their daughter. It is in this sense that the Hebrews called this same phenomenon, *the birth of the moon*, and that Horace says,

*Cælo supinas si tuleris manus,
Nascente lunâ, rursus Phidyle, &c. &c.*

These observations inform us, why in the city of Ilithyia, where Bubastis was adored, the third day of the lunar month was consecrated by a particular worship. In fact, it is three days after the conjunction that the moon, disengaged from the rays of the sun, appears as a crescent, and is visible to us. The Egyptians celebrated therefore a solemnity in honour of Bubastis, which in their tongue signified *new moon*. The crescent with which her head was crowned, expresses palpably the intention of the priests in creating this symbolical divinity.

BUBBLE, in philosophy, small drops or vesicles of any fluid filled with air; and formed either on its surface by an addition of more of the fluid, as in raining, &c.; or in its substance, by an intestine motion of its component particles. Bubbles are dilatable or compressible. *i. e.* they take up more or less room as the included air is more or less heated, or more or less pressed from without; and are round, because the included air acts equally from within all around.

BUBBLE, in commerce, a cant term given to a kind of project for raising money on imaginary grounds, much practised in France and England in the years 1719, 1720, and 1721.

The pretence of those schemes was the raising a capital for retrieving, setting on foot, or carrying on, some

Bubastis,
Bubble.

Bubo,
Bubon.

some promising and useful branch of trade, manufacture, machinery, or the like. To this end proposals were made out, showing the advantages to be derived from the undertaking, and inviting persons to be engaged in it. The sum necessary to manage the affair, together with the profits expected from it, were divided into shares or subscriptions, to be purchased by any disposed to adventure therein.

Bubbles, by which the public have been tricked, are of two kinds, viz. 1. Those which we may properly enough term *trading-bubbles*; and, 2. Stock or fund bubbles. The former have been of various kinds; and the latter at different times, as in 1719 and 1720.

BUBO, in ornithology, the trivial name of a species of strix. See STRIX.

BUBO, or *Buboe*, in surgery, a tumor which arises with inflammation, only in certain or particular parts to which they are proper, as in the arm-pits and in the groins. See MEDICINE-Index.

BUBON, MACEDONIAN PARSLEY: A genus of the digynia order, belonging to the pentandria class of plants; and in the natural method ranking under the 45th order, *Umbellatæ*. The fruit is ovated, striated, and villous.

Species. 1. The macedonicum sends out many leaves from the root; the lowest of which grow almost horizontally, spreading near the surface of the ground: the foot-stalk of each leaf divides into several smaller; which are garnished with smooth rhomb-shaped leaves, which are of a bright pale-green colour, and sawed on their edges. In the centre of the plant arises the flower-stem, which is little more than a foot high, dividing into many branches, each being terminated by an umbel of white flowers, which are succeeded by oblong hairy seeds. This plant, in warm countries, is biennial; the plants, which rise from seeds, one year produce flowers, and seeds the next, and then perish: but in Britain they seldom flower till the third or fourth year from the seed; but whenever the plant flowers, it always dies. 2. The rigidus, hard or rigid ferula, is a native of Sicily. It is a low perennial plant, having short, stiff, and very narrow leaves: the flower-stalk rises a foot high, which is terminated by an umbel of small white flowers; which are succeeded by small, oblong, channelled seeds. It is a plant of little beauty or use, so is only cultivated for the sake of variety. 3. The galbanum or African ferula, rises with an upright stalk to the height of eight or ten feet, which at bottom is woody, having a purplish bark covered with a whitish powder that comes off when handled. The upper part of the stalk is garnished with leaves at every joint, the foot-stalks half-embracing them at their base, and are set with leaves like those of the lovage, but smaller, and of a grey colour: the top of the stalk is terminated by an umbel of yellow flowers; which are succeeded by oblong channelled seeds, which have a thin membrane or wing on their border. When any part of the plant is broken, there issues out a little thin milk of a cream colour, which hath a strong scent of galbanum. 4. The gummiferum, with a mock chervil leaf, rises with a ligneous stalk about the same height; and is garnished with leaves at each joint, which branch out like the former; but the small leaves or lobes are narrow and indented like those of bastard hemlock. The stalk is

terminated by an umbel of small yellow flowers, which are succeeded by seeds like those of the former sort.— These plants are all propagated by seeds, and require the common culture of other exotic vegetables. The galbanum of the shops is supposed to be procured from the third and fourth sorts.

BUBONOCELE, or HERNIA INGUINALIS, in surgery, a tumor in the inguen, formed by a prolapsus of the intestines, omentum, or both, through the processes of the peritoneum and rings of the abdominal muscles. See SURGERY.

BUBONIUM, in botany, a synonyme of the INULA.

BUC (George), a learned English antiquarian, flourished in the beginning of the 17th century. In the reign of king James I. he was made one of the gentlemen of his majesty's privy-chamber, and knighted: he was also constituted master of the revels. What he mostly distinguished himself by was his writing, 1. The history of the reign of Richard III.; in which he takes great pains to wipe off the bloody stains that have blotched his character, and represents the person and actions of that prince in a much less odious light than other historians have done. He also wrote, 2. A treatise of the art of revels; and, 3. A work intitled the Third universitie of England.

BUCANEER, one who dries and smokes flesh or fish after the manner of the Indians. The name was particularly given to the first French settlers on the island of St Domingo, whose sole employment consisted in hunting bulls or wild boars, in order to sell their hides and flesh. The name has also been applied to those famous piratical adventurers, chiefly English and French, who joined together to make depredations on the Spaniards of America. Of both these we shall give an account.

I. *The Buccaneers of St Domingo.* The Spaniards had not been long in the possession of the West Indies and the continent of America, when other nations, especially the English and French, began to follow them there. But though the Spaniards were unable to people such extensive countries themselves, they were resolved that no others should do it for them; and therefore made a most cruel war on all those of any other nation who attempted to settle in any of the Antilles or Caribbee islands. The French, however, were at last lucky enough to acquire some footing in the island of St Christopher's; but by the time they began to subside into a regular form of government, the Spaniards found means to dislodge them. Upon this the wretched fugitives, considering at how great a distance they were from their mother-country, and how near to the island of Hispaniola or St Domingo, the northern parts of which were then uninhabited and full of swine and black cattle, immediately resolved to take possession of that country, in conjunction with several other adventurers of their own and the English nation; especially as the Dutch, who now began to appear in these seas, promised to supply them plentifully with all kinds of necessaries they might require, in exchange for the hides and tallow they should procure by hunting.

These new settlers obtained the name of *bucaneers*, from their custom of bucaning their beef and pork in order to keep it for sale, or for their own consumption, the method of which will be presently described. But

Bubonoccele
Bucaneer.

Bucaneer. some of them soon grew tired of this new way of life, and took to planting; while many more chose to turn pirates, trusting to find among those who remained on shore a quick sale for all the plunder they could make at sea. This new body of adventurers were called *freebooters*, from their making free prey or booty of whatever came in their way.

The colony now began to thrive at a great rate, by the cheap and easy manner in which the freebooters acquired the greatest riches, and the profusion with which they distributed them among their old companions the bucaners and planters for the meereft trifles. This brought numbers of settlers from old France in quality of indented servants, though they toiled rather like slaves during the three years for which they generally bound themselves. One of these men presuming to represent to his master, who always fixed upon a Sunday for sending him with skins to the port, that God had forbidden such a practice, when he had declared, "Six days shalt thou labour, and on the seventh day shalt thou rest:" "And I (replied the brutal bucaner) say to thee, Six days shalt thou kill bulls, and strip them of their skins, and on the seventh day shalt thou carry their hides to the sea-shore." This command was followed by blows, which sometimes enforce obedience, sometimes disobedience to the laws of God.

Thus the colony consisted of four classes: bucaners; freebooters; planters; and indented servants, who generally remained with the bucaners or planters. And these four orders composed what they now began to call the *body of adventurers*. These people lived together in a perfect harmony under a kind of democracy; every freeman had a despotic authority over his own family; and every captain was a sovereign in his own ship, tho' liable to be discarded at the discretion of the crew.

The planters settled chiefly in the little island of Tortuga on the northern coast of Hispaniola: but it was not long before some of them going to the great island to hunt with the bucaners, the rest were surprised by the Spaniards; and all, even those who had surrendered at discretion in hopes of mercy, were put to the sword or hanged.

The next care of the Spaniards was to rid the great island of the bucaners; and for this reason they assembled a body of 500 lance-men, who, by their seldom going fewer than 50 in a company, obtained the name of *the Fifties* from their enemies, whose manners and customs we shall now enter upon.

The bucaners lived in little huts built on some spots of cleared ground, just large enough to dry their skins on, and contain their bucaning houses. These spots they called *Boucans*, and the huts they dwelt in *Ajoupas*, a word which they borrowed from the Spaniards, and the Spaniards from the natives. Though these ajoupas lay open on all sides, they were very agreeable to the hardy inhabitants, in a climate where wind and air are so very desirable things. As the bucaners had neither wife nor child, they associated by pairs, and mutually rendered each other all the services a master could reasonably expect from a servant, living together in so perfect a community, that the survivor always succeeded his deceased partner. This kind of union or fellowship they called *s'emateloter* [in sailing], and each other *matelot* [sailor], whence is derived the custom of gi-

ving, at least in some parts of the French Antilles, the name *matelotage* [sailorage], to any kind of society formed by private persons for their mutual advantage. They behaved to each other with the greatest justice and openness of heart; it would have been a crime to keep any thing under lock and key; but on the other hand, the least pilfering was unpardonable, and punished with expulsion from the community. And indeed there could be no great temptation to steal, when it was reckoned a point of honour never to refuse a neighbour what he wanted; and where there was so little property, it was impossible there should be many disputes. If any happened, the common friends of the parties at variance interposed, and soon put an end to the difference.

As to laws, the bucaners acknowledged none but an odd jumble of conventions made between themselves, which, however, they regarded as the sovereign rule. They silenced all objections by coolly answering, that it was not the custom of the coast; and grounded their right of acting in this manner, on their baptism under the tropic, which freed them, in their opinion, from all obligations antecedent to that marine ceremony. The governor of Tortuga, when that island was again settled, though appointed by the French court, had very little authority over them; they contented themselves with rendering him from time to time some slight homage. They had in a manner entirely shaken off the yoke of religion, and thought they did a great deal in not wholly forgetting the God of their fathers. We are surprised to meet with nations, among whom it is a difficult matter to discover any trace of a religious worship: and yet it is certain, that had the bucaners of St Domingo been perpetuated on the same footing they subsisted at the time we are speaking of, the third or fourth generation of them would have as little religion as the Caffres and Hottentots of Africa, or the Topinambous and Cannibals of America.

They even laid aside their surnames, and assumed nicknames, or martial names, most of which have continued in their families to this day. Many, however, on their marrying, which seldom happened till they turned planters, took care to have their real surnames inserted in the marriage-contract; and this practice gave occasion to a proverb still current in the French Antilles, *a man is not to be known till he takes a wife*.

Their dress consisted of a filthy greasy shirt, dyed with the blood of the animals they killed; a pair of trousers still more nasty: a thong of leather by way of belt, to which they hung a case containing some Dutch knives, and a kind of very short sabre called *Manchette*; a hat without any brim except a little flap on the front to take hold of it by, and shoes of hogskin all of a piece. Their guns were four feet and a half in the barrel, and of a bore to carry balls of an ounce. Every man had his contract servants, more or fewer according to his abilities; besides a pack of 20 or 30 dogs, among which there was always a couple of beagles. Their chief employment at first was ox-hunting; and if at any time they chased a wild hog, it was rather for pastime, or to make provision for a feast, than for any other advantage. But, in process of time, some of them betook themselves entirely to hunting of hogs, whose flesh they bucaned in the following manner: First, they cut the flesh into long pieces, an inch and an half thick, and

Bucaneer.

and sprinkled them with salt, which they rubbed off after 24 hours. Then they dried these pieces in stoves over the fire made of the skin and bones of the beast till they grew as hard as a board, and assumed a deep brown colour. Pork prepared in this manner will keep in casks a twelvemonth and longer; and when steeped but a little while in lukewarm water, became plump and rosy, and yield moreover a most grateful smell, either broiled or boiled, or otherwise dressed, enough to tempt the most languid appetite, and please the most delicate palate. Those who hunt the wild boar have of late been called simply *hunters*.

In hunting, they set out at day-break, preceded by the beagles, and followed by their servants with the rest of the dogs; and as they made it a point never to balk their beagles, they were often led by them over the most frightful precipices, and through places which any other mortal would have deemed absolutely impassable. As soon as the beagles had roused the game, the rest of the dogs struck up and surrounded the beast, stopping it, and keeping a constant barking till the bucaneer could get near enough to shoot it; in doing this, he commonly aimed at the pit of the breast; when the beast fell, he hamstringed it, to prevent its rising again. But it has sometimes happened that the creature, not wounded enough to tumble to the ground, has run furiously at his pursuer, and ripped him open. But, in general, the bucaneer seldom missed his aim; and when he did, was nimble enough to get up the tree behind which he had the precaution to place himself. What is more; some of them have been seen to overtake the beast in chase, and hamstring it without any further ceremony.

As soon as the prey was half skinned, the master cut out a large bone, and sucked the marrow for breakfast. The rest he left to his servants, one of whom always remained behind to finish the skinning, and bring the skin with a choice piece of meat for the huntsmen's dinner. They then continued the chase till they had killed as many beasts as there were heads in the company. The master was the last to return to the boucan, loaded like the rest with a skin and a piece of meat. Here the bucaneeers found their tables ready: for every one had his separate table; which was the first thing, any way fit for the purpose, that came in their way, a stone, the trunk of a tree, and the like. No table-cloth, no napkin, no bread or wine graced their board; not even potatoes or bananas, unless they found them ready to their hands. When this did not happen, the fat and lean of the game, taken alternately, served to supply the place. A little pimento, and the squeeze of an orange, their only sauce; contentment, peace of mind, a good appetite, and abundance of mirth, made every thing agreeable. Thus they lived and spent their time, till they had completed the number of hides for which they had agreed with the merchants; which done, they carried them to Tortuga, or some port of the great island.

As the bucaneeers used much exercise, and fed only on flesh meat, they generally enjoyed a good state of health. They were indeed subject to fevers, but either such as lasted only a day, and left no sensible impression the day following; or little slow fevers, which did not hinder them from action, and were of course so little regarded, that it was usual with the patient, when

asked how he did, to answer, "Very well, nothing ails me but the fever." It was impossible, however, they should not suffer considerably by such fatigues under a climate to the heat of which few of them had been early enough inured. Hence the most considerate among them, after they had got money enough for that purpose, turned planters. The rest soon spent the fruits of their labour in taverns and tippling-houses; and many had so habituated themselves to this kind of life, as to become incapable of any other. Nay, there have been instances of young men, who having early embarked through necessity in this painful and dangerous profession, persisted in it afterwards, merely through a principle of libertinism, rather than return to France and take possession of the most plentiful fortunes.

Such were the bucaneeers of St Domingo, and such their situation, when the Spaniards undertook to extirpate them. And at first they met with great success; for as the bucaneeers hunted separately, every one attended by his servants, they were easily surprised. Hence the Spaniards killed numbers, and took many more, whom they condemned to a most cruel slavery. But whenever the bucaneeers had time to put themselves into a state of defence, they fought like lions, to avoid falling into the hands of a nation from whom they were sure to receive no quarter; and by this means they often escaped: nay, there are many instances of single men fighting their way through numbers. These dangers, however, and the success of the Spaniards in discovering their boucans, where they used to surprise and cut the throats of them and their servants in their sleep, engaged them to cohabit in great numbers, and even to act offensively, in hopes that by so doing they might at last induce the Spaniards to let them live in peace. But the fury with which they behaved whenever they met any Spaniards, served only to make their enemies more intent on their destruction; and assistance coming to both parties, the whole island was turned into a slaughter-house, and so much blood spilt on both sides, that many places, on account of the carnage of which they had been the theatres, were intitled, *of the massacre*: such as *the hill of the massacre*; *the plain of the massacre*; *the valley of the massacre*; which names they retain to this day.

At length the Spaniards grew tired of this way of proceeding, and had recourse to their old method of surprise, which against enemies of more courage than vigilance was like to succeed better. This put the bucaneeers under a necessity of never hunting but in large parties, and fixing their boucans in the little islands on the coast, where they retired every evening. This expedient succeeded; and the boucans, by being more fixed, soon acquired the air and consistency of little towns.

When the bucaneeers had once fixed themselves, as related, each boucan ordered scouts every morning to the highest part of the island, in order to reconnoitre the coast, and see if any Spanish parties were abroad. If no enemy appeared, they appointed a place and hour of rendezvous in the evening, and were never absent if not killed or prisoners. When therefore any one of the company was missing, it was not lawful for the rest to hunt again till they had got intelligence of him, if taken, or avenged his death if killed.

Things continued in this situation for a long time, till the Spaniards made a general hunt over the whole island;

Bucaneer.

Bucaneer. island; and, by destroying their game, put the bucaneeers under a necessity of betaking themselves to another course of life. Some of them turned planters; and thereby increased some of the French settlements on the coast, and formed others. The rest, not relishing so confined and regular a life, entered among the freebooters, who thereby became a very powerful body.

France, who had hitherto disclaimed for her subjects these ruffians whose successes were only temporary, acknowledged them, however, as soon as they formed themselves into settlements; and took proper measures for their government and defence. See the article *St DOMINGO*.

*Savary's
Hist. of
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The hunting both of the bull and boar is at this day carried on, and proves of considerable importance. That of the former furnishes France with the finest hides brought from America. The bucaneeers put the hides in packs which they call loads, mixing together hides of full grown bulls, of young bullocks, and of cows. Each of these loads is composed of two bull-hides, or of an equivalent; that is to say, either of two real bull-hides, or of one bull-hide and two cow-hides, or of four cow-hides, or of three young bullocks hides; three bullocks hides being reckoned equivalent to two full-grown bulls hides, and two cows hides equivalent to one bull's hide. These bulls they commonly call *oxen* in France, though they be not gelt. Each load is commonly sold for six pieces of eight rials, which is a Spanish coin, the French coin being but little current, or not at all, in the island of St Domingo.

The boar meat bucanned in the manner above mentioned is sold by the bundle or pack, weighing commonly 60 pounds, at the rate of six pieces of eight per pack. The palmetto leaves serve to pack it up in; but their weight is deducted, so that there must be in each pack 60 pounds of net flesh. These bucaneeers have also a great trade of the lard of boars, which they melt, and gather in large pots called *potiches*. This lard, which is called *mantegua*, is also sold for about eight pieces of eight per pot. There is a great trade, and a great consumption of each of these merchandises in the French settlements of the island of St Domingo, and in those of Tortuga: besides which, they used to send great quantities of them to the Antilles, and even into the continent of French America. There is also a great deal of it sold for the support of the crews of the ships that come from France for trading, or which the privateers of Tortuga fit out for cruising against the Spaniards.

The Spaniards, who have large settlements in the island of St Domingo, have also their bucaneeers there, whom they call *matadores* or *monteros*. Their chace has something noble, which favours of the Spanish pride: the huntsman being on horseback, uses the lance to strike the bull, thinking it beneath his courage to shoot him at a distance. When the servants, who are on foot, have discovered the beast, and with their dogs have driven it into some savannah or meadow, in which the master waits for them on horseback, armed with two lances, that matadore goes and hamstringing it with the first lance, the head of which is made like a crescent or half-moon, and extremely sharp, and kills it afterwards with the other lance, which is a common one. This chace is very agreeable; the huntsman making com-

monly, in order to attack the bull, the same turns and the same ceremonies which are practised in those festivals so famous in Spain, wherein the greatest lords expose themselves sometimes to the view of the people, to make them admire their dexterity and intrepidity in attacking those furious animals: but then it is a very dangerous chace; those bulls, in their fury, often running directly against the huntsman, who may think himself very happy if he comes off only with the loss of his horse, and if he himself is not mortally wounded.

The Spaniards dress their hides like the French, who have learned it from them; and these hides being carried to the Havannah, a famous harbour in the island of Cuba, are part of the trade of that celebrated town. The flota and the galleons scarce ever fail touching there, on their return from Vera Cruz and Porto Bello, and load there those hides which they carry into Spain, where they are sold for Havannah hides, the most esteemed of any that are brought from America into Europe.

II. **BUCANEERS, the Pirates.** Before the English had made any settlement at Jamaica, and the French at St Domingo, some pirates of both nations, who have since been so much distinguished by the name of *Bucaneers*, had driven the Spaniards out of the small island of Tortuga; and, fortifying themselves there, had with an amazing intrepidity made excursions against the common enemy. They formed themselves into small companies, consisting of 50, 100, or 150 men each. A boat, of a greater or smaller size, was their only armament. Here they were exposed night and day to all the inclemencies of the weather, having scarce room enough to lie down. A love of absolute independence, the greatest blessing to those who are not proprietors of land, rendered them averse from those mutual restraints which the members of society impose upon themselves for the common good; some of them chose to sing, while others were desirous of going to sleep. As the authority they had conferred on their captain was confined to his giving orders in battle, they lived in the greatest confusion. Like the savages, having no apprehension of want, nor any care to preserve the necessaries of life, they were constantly exposed to the severest extremities of hunger and thirst. But deriving, even from their very distresses, a courage superior to every danger, the sight of a ship transported them to a degree of frenzy. They never deliberated on the attack, but it was their custom to board the ship as soon as possible. The smallness of their vessels, and the skill they showed in the management of them, screened them from the fire of the greater ships; and they presented only the fore part of their little vessels filled with fusileers; who fired at the port-holes with so much exactness, that it entirely confounded the most experienced gunners. As soon as they threw out the grappling, the largest vessels seldom escaped them.

In cases of extreme necessity, they attacked the people of every nation, but fell upon the Spaniards at all times. They thought that the cruelties the latter had exercised on the inhabitants of the new world justified the implacable aversion they had sworn against them. But this was heightened by a personal pique, from the mortification they felt in seeing themselves debarred from the privilege of hunting and fishing, which they

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*Raynal's
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Indies.*

Bucaneer. considered as natural rights. Such were their principles of justice and religion, that, whenever they embarked on any expedition, they used to pray to heaven for the success of it; and they never came back from the plunder, but they constantly returned thanks to God for their victory.

The ships that sailed from Europe into America seldom tempted their avidity. The merchandise they contained would not easily have been sold, nor been very profitable to these barbarians in those early times. They always waited for them on their return, when they were certain that they were laden with gold, silver, jewels, and all the valuable productions of the new world. If they met with a single ship, they never failed to attack her. As to the fleets, they followed them till they sailed out of the gulph of Bahama; and as soon as any one of the vessels was separated by accident from the rest, it was taken. The Spaniards, who trembled at the approach of the bucaners, whom they called *devils*, immediately surrendered. Quarter was granted, if the cargo proved to be a rich one; if not, all the prisoners were thrown into the sea.

The bucaners, when they had got a considerable booty, at first held their rendezvous at the island of Tortuga, in order to divide the spoil; but afterwards the French went to St Domingo, and the English to Jamaica. Each person, holding up his hand, solemnly protested, that he had secreted nothing of what he had taken. If any one among them was convicted of perjury, a case that seldom happened, he was left, as soon as an opportunity offered, upon some desert island, as a traitor unworthy to live in society. Such brave men among them as had been maimed in any of their expeditions, were first provided for. If they had lost a hand, an arm, a leg, or a foot, they received 26l. An eye, a finger, or a toe, lost in fight, was valued only at half the above sum. The wounded were allowed 2s. 6d. a day for two months, to enable them to have their wounds taken care of. If they had not money enough to answer these several demands, the whole company were obliged to engage in some fresh expedition, and to continue it till they had acquired a sufficient stock to enable them to satisfy such honourable contracts.

After this act of justice and humanity, the remainder of the booty was divided into as many shares as there were bucaners. The commander could only lay claim to a single share as the rest; but they complimented him with two or three, in proportion as he had acquitted himself to their satisfaction. Favour never had any influence in the division of the booty; for every share was determined by lot. Instances of such rigid justice as this are not easily met with; and they extended even to the dead. Their share was given to the man who was known to be their companion when alive, and therefore their heir. If the person who had been killed had no intimate, his part was sent to his relations when they were known. If there were no friends or relations, it was distributed in charity to the poor and to churches, which were to pray for the person in whose name these benefactions were given.

When these duties had been complied with, they then indulged themselves in all kinds of profusion. Unbounded licentiousness in gaming, wine, women, every kind of debauchery, was carried to the utmost pitch

Bucaneer. of excess, and was stopt only by the want which such profusions brought on. Those men who were enriched with several millions, were in an instant totally ruined, and destitute of clothes and provisions. They returned to sea; and the new supplies they acquired were soon lavished in the same manner.

The Spanish colonies, flattering themselves with the hopes of seeing an end to their miseries, and reduced almost to despair in finding themselves a perpetual prey to these ruffians, grew weary of navigation. They gave up all the power, conveniences, and fortune, which their connections procured them, and formed themselves almost into so many distinct and separate states. They were sensible of the inconveniences arising from such a conduct, and avowed them; but the dread of falling into the hands of rapacious and savage men, had greater influence over them than the dictates of honour, interest, and policy. This was the rise of that spirit of inactivity which continues to this time.

This despondency served only to increase the boldness of the bucaners. As yet they had only appeared in the Spanish settlements, in order to carry off some provisions when they were in want of them. They no sooner found their captures begin to diminish, than they determined to recover by land what they had lost at sea. The richest and most populous countries of the continent were plundered and laid waste. The culture of lands was equally neglected with navigation; and the Spaniards dared no more appear in their public roads than sail in the latitudes which belonged to them.

Among the bucaners who signalized themselves in this new species of excursions, Montbar, a gentleman of Languedoc, particularly distinguished himself. Having by chance, in his infancy, met with a circumstantial account of the cruelties practised in the conquest of the new world, he conceived an aversion which he carried to a degree of frenzy against that nation which had committed such enormities. The enthusiasm this spirit of humanity worked him up to, was turned into a rage more cruel than that of religious fanaticism, to which so many victims had been sacrificed. The names of these unhappy sufferers seemed to rouse him, and call upon him for vengeance. He had heard some account of the bucaners, who were said to be the most inveterate enemies to the Spanish name: he therefore embarked on board a ship, in order to join them.

In the passage, they met with a Spanish vessel; attacked it; and, as it was usual in those times, immediately boarded it. Montbar, with a sabre in his hand, fell upon the enemy; broke through them; and, hurrying twice from one end of the ship to the other, levelled every thing that opposed him. When he had compelled the enemy to surrender, leaving to his companions the happiness of dividing so rich a booty, he contented himself with the savage pleasure of contemplating the dead bodies of the Spaniards, lying in heaps together, against whom he had sworn a constant and deadly hatred.

Fresh opportunities soon occurred, that enabled him to exert this spirit of revenge, without extinguishing it. The ship he was in arrived at the coast of St Domingo: where the bucaners on land immediately applied to barter some provisions for brandy. As the articles

they

Bucaneer. they offered were of little value, they alleged in excuse, that their enemies had over-run the country, laid waste their settlements, and carried off all they could. "Why (replied Montbar) do you tamely suffer such insults?" "Neither do we (answered they in the same tone); the Spaniards have experienced what kind of men we are, and have therefore taken advantage of the time when we were engaged in hunting. But we are going to join some of our companions, who have been still more ill treated than we; and then we shall have warm work." "If you approve of it (answered Montbar), I will head you, not as your commander, but as the foremost to expose myself to danger." The bucaners, perceiving from his appearance that he was such a man as they wanted, cheerfully accepted his offer. The same day they overtook the enemy, and Montbar attacked them with an impetuosity that astonished the bravest. Scarce one Spaniard escaped the effects of his fury. The remaining part of his life was equally distinguished as on this day. The Spaniards suffered so much from him, both by land and at sea, that he acquired the name of the *Exterminator*.

His savage disposition, as well as that of the other bucaners who attended him, having obliged the Spaniards to confine themselves within their settlements, these free-booters resolved to attack them there. This new method of carrying on the war required superior forces; and their associations in consequence became more numerous. The first that was considerable was formed by Lolonois, who derived his name from the sands of Olones the place of his birth. From the abject state of a bondsman, he had gradually raised himself to the command of two canoes, with 22 men. With these he was so successful as to take a Spanish frigate on the coast of Cuba. He then repaired to the Port-au-Prince, in which were four ships, fitted out purposely to sail in pursuit of him. He took them, and threw all the crew into the sea except one man, whom he saved, in order to send him with a letter to the governor of the Havannah, acquainting him with what he had done, and assuring him that he would treat in the same manner all the Spaniards that should fall into his hands, not excepting the governor himself, if he should be so fortunate as to take him. After this expedition, he ran his canoes and prize-ships aground, and sailed with his frigate only to the island of Tortuga.

Here he met with Michael de Basco, who had distinguished himself by having taken, even under the cannon of Porto-Bello, a Spanish ship, estimated at 218,500 l. and by other actions equally brave and daring. These two gave out, that they were going to embark together on an expedition equally glorious and profitable; in consequence of which they soon collected together 440 men. This body of men, the most numerous the bucaners had yet been able to muster, sailed to the bay of Venezuela, which runs up into the country for the space of 50 leagues. The fort that was built at the entrance of it for its defence was taken; the cannon were nailed up; and the whole garrison, consisting of 250 men, put to death. They then reembarked, and came to Maracaybo, built on the western coast of the lake of the same name, at the distance of ten leagues from its mouth. This city, which had become flourishing and rich by its trade in skins, tobacco, and cocoa, was deserted. The inhabitants had retired with

their effects to the other side of the bay. If the bucaners had not lost a fortnight in riot and debauch, they would have found at Gibraltar, near the extremity of the lake, every thing that the inhabitants had secreted to secure it from being plundered. On the contrary, they met with fortifications lately erected, which they had the useless satisfaction of making themselves masters of at the expence of a great deal of blood; for the inhabitants had already removed at a distance the most valuable part of their property. Exasperated at this disappointment, they set fire to Gibraltar. Maracaybo would have shared the same fate, had it not been ransomed. Besides the sum they received for its ransom, they also carried off with them all the crosses, pictures, and bells of the churches; intending, as they said, to build a chapel in the island of Tortuga, and to consecrate this part of their spoils to sacred purposes. Such was the religion of these barbarous people, who could make no other offering to heaven than that which arose from their robberies and plunder.

While they were idly dissipating the spoils they had made on the coast of Venezuela, Morgan, the most renowned of the English bucaners, sailed from Jamaica to attack Porto-Bello. His plan of operations was so well contrived, that he surprised the city, and took it without opposition.

The conquest of Panama was an object of much greater importance. To secure this, Morgan thought it necessary to sail in the latitudes of Costa-Ricca; to procure some guides in the island of St Catharine's, where the Spaniards confined their malefactors. This place was so strongly fortified, that it ought to have held out for ten years against a considerable army. Notwithstanding this, the governor, on the first appearance of the pirates, sent privately to concert measures how he might surrender himself without incurring the imputation of cowardice. The result of this consultation was, that Morgan, in the night-time, should attack a fort at some distance, and the governor should sally out of the citadel to defend a post of so much consequence; that the assailants should then attack him in the rear, and take him prisoner, which would consequently occasion a surrender of the place. It was agreed that a smart firing should be kept on both sides, without doing mischief to either. This farce was admirably carried on. The Spaniards, without being exposed to any danger, appeared to have done their duty; and the bucaners, after having totally demolished the fortifications, and put on board their vessels a prodigious quantity of warlike ammunitions which they found at St Catharine's, steered their course towards the river Chagre, the only channel that was open to them to arrive at the place which was the object of their utmost wishes.

At the entrance of this considerable river, a fort was built upon a steep rock, which the waves of the sea constantly beat against. This bulwark, very difficult of access, was defended by an officer whose extraordinary abilities were equal to his courage, and by a garrison that deserved such a commander. The bucaners, for the first time, here met with a resistance that could only be equalled by their perseverance: it was a doubtful point, whether they would succeed or be obliged to raise the siege, when a lucky accident happened that proved-favourable to their glory and their

Bucaneers. their fortune. The commander was killed, and the fort accidentally took fire; the besiegers then taking advantage of this double calamity, made themselves masters of the place.

Morgan left his vessels at anchor, with a sufficient number of men to guard them; and sailed up the river in his sloops for 33 miles, till he came to Cruces, where it ceases to be navigable. He then proceeded by land to Panama, which was only five leagues distant. Upon a large and extensive plain that was before the city, he met with a considerable body of troops, whom he put to flight with the greatest ease, and entered into the city, which was now abandoned. Here were found prodigious treasures concealed in the wells and caves. Some valuable commodities were also taken upon the boats that were left aground at low water; and in the neighbouring forests were also found several rich deposits.

Having burnt the city, they set sail with a great number of prisoners, who were ransomed a few days after; and came to the mouth of the Chagre with a prodigious booty.

In 1603, an expedition of the greatest consequence was formed by Van Horn, a native of Ostend, but who had served all his life among the French. His intrepidity would never let him suffer the least signs of cowardice among those who associated with him. In the heat of an engagement, he went about his ship; successively observed his men; and immediately killed those who shrank at the sudden report of a pistol, gun, or cannon. This extraordinary discipline had made him become the terror of the coward and the idol of the brave. In other respects, he readily shared with the men of spirit and bravery the immense riches that were acquired by so truly warlike a disposition. When he went upon these expeditions, he generally sailed in his frigate, which was his own property. But these new designs requiring greater numbers to carry them into execution, he took to his assistance Gramont, Godfrey, and Jonqué, three Frenchmen distinguished by their exploits; and Lawrence de Graff, a Dutchman, who had signalized himself still more than they. Twelve hundred bucaners joined themselves to these famous commanders, and sailed in six vessels for Vera Cruz.

The darkness of the night favoured their landing, which was effected at three leagues from the place, where they arrived without being discovered. The governor, the fort, the barracks, and the posts of the greatest consequence; every thing, in short, that could occasion any resistance, was taken by the break of day. All the citizens, men, women, and children, were shut up in the churches, whither they had fled for shelter. At the door of each church were placed barrels of gunpowder to blow up the building. A bucaner, with a lighted match, was to set fire to it upon the least appearance of an insurrection.

While the city was kept in such terror, it was easily pillaged; and after the bucaners had carried off what was most valuable, they made a proposal to the citizens who were kept prisoners in the churches, to ransom their lives and liberties by a contribution of 437,500 l. These unfortunate people, who had neither ate nor drank for three days, cheerfully accepted the terms that were offered them. Half of the money was paid the

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same day: the other part was expected from the internal parts of the country; when there appeared on an eminence a considerable body of troops advancing, and near the port a fleet of 17 ships from Europe. At the sight of this armament, the bucaners, without any marks of surprize, retreated quietly, with 1500 slaves they had carried off with them as a trifling indemnification for the rest of the money they expected, the settling of which they referred to a more favourable opportunity.

Their retreat was equally daring. They boldly sailed through the midst of the Spanish fleet; which let them pass without firing a single gun, and were in fact rather afraid of being attacked and beaten. The Spaniards would not probably have escaped so easily, and with no other inconvenience but what arose from their fears, if the vessels of the pirates had not been laden with silver, or if the Spanish fleet had been freighted with any other effects but such merchandise as were little valued by these pirates.

A year had scarce elapsed since their return from Mexico, when on a sudden they were all seized with the rage of going to plunder the country of Peru. It is probable, that the hope of finding greater treasures upon a sea little frequented, than on one long exposed to piracies of this kind, was the cause of this expedition. But it is somewhat remarkable, that both the English and French, and the particular associations of these two nations, had projected this plan at the same time, without any communication, intercourse, or design of acting in concert with each other. About 4000 men were employed in this expedition. Some of them came by Terra-Firma, others by the straits of Magellan, to the place that was the object of their wishes. If the intrepidity of these barbarians had been directed, under the influence of a skilful and respectable commander, to one single uniform end, it is certain that they would have deprived the Spaniards of this important colony. But their natural character was an invincible obstacle to so rare an union; for they always formed themselves into several distinct bodies, sometimes even so few in number as ten or twelve, who acted together, or separated, as the most trifling caprice directed. Grogner, Lécuyer, Picard, and Le Sage, were the most distinguished officers among the French: David, Samms, Peter, Wilner, and Towley, among the English.

Such of those adventurers as had got into the South Sea by the straits of Darien, seized upon the first vessels they found upon the coast. Their associates, who had sailed in their own vessels, were not much better provided. Weak however as they were, they beat several times the squadrons that were fitted out against them. But these victories were prejudicial to them, as they interrupted their navigation. When there were no more ships to be taken, they were continually obliged to make descents upon the coasts to get provisions, or to go by land in order to plunder those cities where the booty was secured. They successively attacked Seppa, Puebla-Nuevo, Leon, Realejo, Puebla-Viejo, Chiriquita, Lesparso, Granada, Villia, Nicoya, Tecoa-teca, Mucmeluna, Chiloteca, New-Segovia, and Guayaquil, the most considerable of all these places.

Many of them were taken by surprize; and most of them deserted by their inhabitants, who fled at the

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fight

Bucaneers. fight of the enemy. As soon as they took a town, it was directly set on fire, unless a sum proportioned to its value was given to save it. The prisoners taken in battle were massacred without mercy, if they were not ransomed by the governor or some of the inhabitants: gold, pearls, or precious stones, were the only things accepted of for the payment of their ransom. Silver being too common, and too weighty for its current value, would have been troublesome to them. The chances of fortune, that seldom leave guilt unpunished, nor adversity without a compensation for its suffering, atoned for the crimes committed in the conquest of the new world, and the Indians were amply revenged of the Spaniards.

While such piracies were committed on the southern ocean, the northern was threatened with the same by Gramont. He was a native of Paris, by birth a gentleman, and had distinguished himself in a military capacity in Europe; but his passion for wine, gaming, and women, had obliged him to join the pirates. He was, however, affable, polite, generous, and eloquent: he was endued with a sound judgment, and was a person of approved valour; which soon made him be considered as the chief of the French bucaners. As soon as it was known that he had taken up arms, he was immediately joined by a number of brave men. The governor of St Domingo, who had at length prevailed upon his master to approve of the project, equally wise and just, of fixing the pirates to some place, and inducing them to become cultivators, was desirous of preventing the concerted expedition, and forbade it in the king's name. Gramont, who had a greater share of sense than his associates, was not on that account more inclined to comply, and sternly replied: "How can Louis disapprove of a design he is unacquainted with, and which has been planned only a few days ago?" This answer highly pleased all the bucaners; who directly embarked, in 1685, to attack Campeachy.

They landed without opposition. But at some distance from the coast, they were attacked by 800 Spaniards, who were beaten and pursued to the town; where both parties entered at the same time. The cannon they found there was immediately levelled against the citadel. As it had very little effect, they were contriving some stratagem to enable them to become masters of the place, when intelligence was brought that it was abandoned. There remained in it only a gunner; an Englishman; and an officer of such signal courage, that he chose rather to expose himself to the greatest extremities, than basely to fly from the place with the rest. The commander of the bucaners received him with marks of distinction, generously released him, gave him up all his effects, and besides complimented him with some valuable presents: such influence have courage and fidelity even on the minds of those who seem to violate all the rights of society.

The conquerors of Campeachy spent two months in searching all the environs of the city, for 12 or 15 leagues, carrying off every thing that the inhabitants, in their flight, thought they had preserved. When all the treasure they had collected from every quarter was deposited in the ships, a proposal was made to the governor of the province, who still kept the field with 900 men, to ransom his capital city. His refusal de-

termined them to burn it, and demolish the citadel. **Bucaneers.** The French, on the festival of St Louis, were celebrating the anniversary of their king; and in the transports of their patriotism, intoxication, and national love of their prince, they burnt to the value of a million of logwood; a part, and a very considerable one too, of the spoil they had made. After this singular and extravagant instance of folly, of which Frenchmen only could boast, they returned to St Domingo.

In 1697, 1200 bucaners were induced to join a squadron of seven ships that sailed from Europe under the command of Pointis, to attack the famous city of Carthagena. This was the most difficult enterprise that could be attempted in the new world. The situation of the port, the strength of the place, the badness of the climate, were so many obstacles that seemed insurmountable to any but such men as the bucaners were. But every obstacle yielded to their valour and good fortune: the city was taken, and booty gained to the amount of 1,750,000 l. Their rapacious commander, however, deprived them of the advantages resulting from their success. He scrupled not, as soon as they set sail, to offer 5250 l. for the share of those who had been the chief instruments in procuring him so considerable a spoil.

The bucaners, exasperated at this treatment, resolved immediately to board the vessel called the *Sceptre*, where Pointis himself was, and which at that time was too far distant from the rest of the ships to expect to be assisted by them. This avaricious commander was upon the point of being massacred, when one of the malcontents cried out: "Brethren, why should we attack this rascal? he has carried off nothing that belongs to us. He has left our share at Carthagena, and there we must go to recover it." This proposal was received with general applause. A savage joy at once succeeded that gloomy melancholy which had seized them; and without further deliberation all their ships sailed towards the city.

As soon as they had entered the city without meeting with any resistance, they shut up all the men in the great church; and exacted payment of 218,750 l. the amount of their share of booty which they had been defrauded of; promising to retreat immediately upon their compliance, but threatening the most dreadful vengeance if they refused. Upon this, the most venerable priest in the city mounted the pulpit, and made use of the influence his character, his authority, and his eloquence gave him, to persuade his hearers to yield up without reserve all the gold, silver, and jewels they had. The collection, which was made after the sermon, not furnishing the sum required, the city was ordered to be plundered.

At length, after amassing all they could, these adventurers set sail; when unfortunately they met with a fleet of Dutch and English ships, both which nations were then in alliance with Spain. Several of the pirates were either taken or sunk, with all the cargo they had on board their ships; the rest escaped to St Domingo.

Such was the last memorable event in the history of the bucaners. The separation of the English and French, when the war, on account of the prince of Orange, divided the two nations: the successful means they both made use of to promote the cultivation of

land.

Buccellarii
Buccinum.

land among their colonies, by the assistance of these enterprising men; and the prudence they showed in fixing the most distinguished among them, and entrusting them with civil and military employments: the protection they were both under a necessity of affording to the Spanish settlements, which till then had been a general object of plunder: all these circumstances, and various others, besides the impossibility there was of supplying the place of these remarkable men, who were continually dropping off, concurred to put an end to a society as extraordinary as ever existed. Without any regular system, without laws, without any degree of subordination, and even without any fixed revenue, they became the astonishment of that age in which they lived, as they will be also of posterity.

BUCCELLARI, an order of soldiery under the Greek emperors, appointed to guard and distribute the ammunition bread; though authors are somewhat divided as to their office and quality. Among the Visigoths, buccellarius was a general name for a client or vassal who lived at the expence of his lord. Some give the denomination to parasites in the courts of princes, some make them the body-guards of emperors, and some fancy they were only such as emperors employed in putting persons to death privately.

BUCCELLATUM, among ancient military writers, denotes camp-bread, or biscuit baked hard and dry, both for lightness and keeping. Soldiers always carried with them enough for a fortnight, and sometimes much longer, during the time that military discipline was kept up.

BUCCINA, an ancient musical and military instrument. It is usually taken for a kind of trumpet; which opinion is confirmed by Festus, by his defining it a crooked horn, played on like a trumpet. Vegetius observes, that the buccina bent in a semicircle, in which respect it differed from the tuba or trumpet. It is very hard to distinguish it from the cornu or horn, unless it was something less, and not quite so crooked; yet it certainly was of a different species, because we never read of the cornu in use with the watch, but only the buccina. Besides, the sound of the buccina was sharper, and to be heard much farther than either the cornu or the tuba. In scripture, the like instrument, used both in war and in the temple, was called *rams-horns*, *kirenjobel*, and *sopheroth bagijobelim*.

This instrument was in use among the Jews to proclaim their feast-days, new-moons, jubilees, sabbatic years, and the like. At Lacedemon, notice was given by the buccina when it was supper time; and the like was done at Rome, where the grandees had a buccina blown both before and after they sat down to table. The sound of the buccina was called *buccinus*, or *bucinus*; and the musician who played on it was called *buccinator*.

BUCCINUM, or WHELK, a genus of shell-fish belonging to the order of vermes testaceæ. This animal is one of the snail kind. The shell is univalve, spiral, and gibbous. The aperture is oval, ending in a small strait canal. Linnæus enumerates about 60 species, most of which are found in the southern seas. The six following are found in the British seas.

1. The pullus, or brown whelk, with five spires striated, waved, and tuberculated. Aperture wrink-

led; upper part replicated. Length five eighths of an inch. Buccinum
Buccleugh.

2. The undatum, or waved whelk, with seven spires, is spirally striated and deeply and transversely undulated. Length three inches. Inhabits deep water.

3. The striatum has eight spires, with elevated striæ, undulated near the apex. Length near four inches.

4. The reticulatum, with spires scarcely raised, and strongly reticulated, is of a deep brown colour, and of an oblong form. The aperture white, glossy, and denticulated. Size of a hazel nut.

5. The minutum, or small whelk, with five spires, striated spirally, ribbed transversely. Size less than a pea. Found also in Norway.

6. The lapillus, or massy whelk, with about five spires; side of the mouth slightly toothed: a very strong thick shell, of a whitish colour. A variety yellow, or fasciated with yellow, on a white ground; or fulcated spirally, and sometimes reticulated. Length near an inch and an half. Inhabits, in a vast abundance, rocks near low-water mark. This is one of the British shells that produce the purple dye analogous to the *purpura* of the ancients. See MUREX.

The process of obtaining the English purpura is well described by Mr William Cole of Bristol, in 1684, in the following words: "The shells, being harder than most other kinds, are to be broken with a smart stroke of a hammer, on a plate of iron or firm piece of timber (with their mouths downwards), so as not to crush the body of the fish within; the broken pieces being picked off, there will appear a white vein lying transversely in a little furrow or cleft next to the head of the fish, which must be dugged out with the stiff point of a horse-hair pencil, being made short and tapering. The letters, figures, or what else shall be made on the linen, (and perhaps silk too), will presently appear of a pleasant light green colour; and if placed in the sun, will change into the following colours; (*i. e.* if in winter, about noon; if in summer, an hour or two after sun-rising, and so much before setting; for in the heat of the day in summer, the colours will come on so fast, that the succession of each colour will scarcely be distinguished.) Next to the light green, it will appear of a deep green; and in a few minutes, change into a sea-green; after which, in a few minutes more, it will alter to a wotchet-blue; from that, in a little time more, it will be of a purple-red; after which (supposing the sun still shining), it will be of a very deep purple red, beyond which the sun can do no more. But then, the last and most beautiful colour, after washing in scalding water and soap, will (the matter being again put into the wind or sun to dry) be of a fair bright crimson, or near to the prince's colour; which afterwards, notwithstanding there is no use of any styptic to bind the colour, will continue the same if well ordered; as I have found in handkerchiefs, that have been washed more than 40 times; only it will be somewhat allayed from what it was after the first washing. While the cloth so writ upon lies in the sun, it will yield a very strong and fetid smell, as if garlic and assafœtida were mixed together."

BUCCLEUGH, a village in the county of Selkirk in Scotland, from which the noble family of Scott have the title of Duke; and would likewise have been

Bucco
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Bucer.

duke of Monmouth, had it not been for the attainder, they being the lineal descendants of his Grace: they are now also heirs to the noble family of Montague in England.

BUCCO, the **BARBET**, in ornithology, a genus belonging to the order of picæ. The beak is cultrated, turned inwards, compressed on the sides, and emarginated on each side at the apex; and there is a long slit below the eyes. The nostrils are covered with feathers. The feet have four toes, two before and two behind. Linnæus mentions only one species, the capensis; but ornithologists enumerate several, either as such or as individuals, differing only in age or sex, all found in Asia, Africa, or the southern parts of America.

BUCENTAUR, a galeas, or large galley of the doge of Venice, adorned with fine pillars on both sides, and gilt over from the prow to the stern. This vessel is covered over head with a kind of tent, made of purple silk. In it the doge receives the great lords and persons of quality that go to Venice, accompanied with the ambassadors and counsellors of state, and all the senators seated on benches by him. The same vessel serves also in the magnificent ceremony of ascension day, on which the duke of Venice throws a ring into the sea to espouse it, and to denote his dominion over the gulph of Venice.

BUCENTAUR is also the name of a ship, as great and as magnificent as that of the Venetians, built by order of the elector of Bavaria, and lunched on a lake which is six leagues in length.

BUCEPHALA, or **BUCEPHALOS**, (anc. geog.) a town built by Alexander, on the west side of the Hydaspis, a river of the Hither India, in memory of his horse Bucephalus, which was killed in the action with Porus, after crossing that river. Others say, this horse died of age, 30 years old; and not in the battle, but some time after. His being branded or marked on the buttock with the head of an ox, gave rise to his name, (Hesychius.)—This generous animal, who had so long shared the toils and dangers of his master, had formerly received signal marks of royal regard. Having disappeared in the country of the Uxii, Alexander issued a proclamation, commanding his horse to be restored, otherwise he would ravage the whole country with fire and sword. This command was immediately obeyed. "So dear," says Arrian "was Bucephalus to Alexander, and so terrible was Alexander to the Barbarians."

BUCER (Martin), one of the first authors of the reformation at Strasburg, was born in 1491, in Alsace; and took the religious habit of St Dominic, at seven years of age: but meeting afterward with the writings of Martin Luther, and comparing them with the Scriptures, he began to entertain doubts concerning several things in the Romish religion. After some conferences with Luther at Heidelberg in 1521, he adopted most of his sentiments; but in 1532 he gave the preference to those of Zuinglius. He assisted in many conferences concerning religion; and in 1548 was sent for to Augsburg to sign the agreement between the Papists and Protestants, called the *interim*. His warm opposition to this project exposed him to many difficulties and hardships; the news of which reaching England, where his fame had already arrived,

Cranmer archbishop of Canterbury gave him an invitation to come over, which he readily accepted. In 1549, an handsome apartment was assigned him in the university of Cambridge, and a salary to teach theology. King Edward VI. had the greatest regard for him. Being told that he was very sensible of the cold of the climate and suffered much for want of a German stove, he sent him 100 crowns to purchase one. He died of a complication of disorders in 1551; and was buried at Cambridge with great funeral pomp. Five years after, in the reign of queen Mary, his body was dug up, and publicly burnt, and his tomb demolished; but it was afterwards set up by order of queen Elizabeth. He composed many works, among which are commentaries on the evangelists and gospels.

BUCEROS, in ornithology, a genus belonging to the order of picæ. The beak is convex, cultrated, very large, and serrated outwards: the fore-head is naked, with a bony gibbosity. The nostrils are behind the base of the beak. The tongue is sharp and short. The feet are of the gressarii kind, *i. e.* the toes are distinct from each other. There are four species of the buceros, *viz.* 1. The bicornis, with a flat bony forehead, and two horns before. The body is black, and about the size of a hen; but the breast, belly, and thighs are white. There is a white spot on the wing; the tail is long, with ten black prime feathers, and the four outermost on each are white. The feet are greenish with three toes before and one behind. It is a native of China, and called *calao* by Willoughby and other authors. The pied horn-bill, described by Mr Latham (*Synops.* Vol. I. p. 349.) from a living specimen which came from the East Indies, the author supposes to be the same species, differing merely in sex or age. In size, it was a trifle bigger than a crow. The manners of this bird were peculiar: it would leap forwards or sideways with both legs at once like a magpie or jay, never walking: when at rest, it folded its head back between the wings: the general air and appearance was rather stupid and dull, though it would sometimes put on a fierce look if at any time it was surprised or the like: it would eat lettuce after bruising it with its bill, and swallow raw flesh; as well as devour rats, mice, and small birds, if given to him: it had different tones of voice on different occasions; sometimes a hoarse sound in the throat, most like oück, oück; at other times very hoarse and weak, not unlike the clucking of a Turkey hen. This bird used to display the wings and enjoy itself in a warm sun, but shivered in the cold; and as the winter approached died, unable to bear the severity of the climate, so different to its nature. Another variety, the *calao* (Phil. Trans. vol. xxiii. p. 394), is about the size of a hen. It inhabits the Philippine islands, and has a cry more like that of a hog or a calf than of a bird. The Gentoos rank it among their gods, and pay worship to it. It lives altogether in woods, feeding on fruits, such as the Indian fig, also pistachios, &c. which it swallows whole; and after the external parts have been digested, it brings up the nuts again whole, without the kernels being anywise damaged or unfit for vegetation. 2. The hydrocorax or Indian crow of Ray, has a plain bony fore-head without any horns. The body is yellowish, and blackish below. It inhabits the Molucca

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isles. Willoughby observes, that it resembles our raven in the bill, but is red on the temples like some kinds of turkies; has wide nostrils and ill-favoured eyes; and that it feeds chiefly on nutmegs, whence its flesh is very delicatic, and has a fine aromatic relish. This in its native places is frequently tamed, and is useful in destroying rats and mice in houses. 3. The rhinoceros, has a crooked horn in the fore-head joined to the upper mandible. It is a native of India. These birds are said to feed on flesh and carrion; and that they follow the hunters for the purpose of feeding on the entrails of the beasts which they kill; that they chase rats and mice, and after pressing them flat with the bill in a peculiar manner, tossing them up into the air, swallow them whole immediately on their descent. 4. The nasutus, has a smooth forehead. It is about the size of a magpye, and is a native of Senegal. These are very common at Senegal and other warm parts of the old continent, where they are called *tack*. They are very tame and foolish birds while young, insomuch as to suffer themselves to be taken by the hand; but having learned experience with mature age, they then become rather shy. When taken young they immediately become familiar; but are so stupid as not to feed of themselves, though food be offered to them, requiring it to be put into their mouths. In their wild state they feed on fruits, but when domesticated eat bread, and will swallow almost any thing that is offered to them.

BUCHAN, a county or district of Scotland, lying partly in the shire of Aberdeen and partly in that of Banff: it gives the title of earl to the noble and ancient family of Erskine.

BUCHANAN (George), the best Latin poet of his time, perhaps inferior to none since the Augustan age, was born in February 1506. This accomplished scholar and distinguished wit was not descended of a family remarkable for its rank. He had no occasion for the splendor of ancestry. He wanted not a reflected greatness, the equivocal, and too often the only ornament of the rich and noble. The village of Kilmearn, in Stirling-shire, Scotland, was the place of his nativity; and the abject poverty in which his father died might have confined him to toil at the lowest employments of life, if the generosity of an uncle had not assisted him in his education, and enabled him to pursue for two years his studies at Paris. But that short space was scarcely elapsed, when the death of his benefactor made it necessary that he should return to his own country, and forsake, for a time, the paths of science,

He was yet under his 20th year, and surrounded with the horrors of indigence. In this extremity, he enlisted as a common soldier under John duke of Albany, who commanded the troops which France had sent to assist Scotland in the war it waged, at this period, against England. But nature had not destined him to be a hero. He was disgusted with the fatigues of one campaign; and, fortunately, John Major, then professor of philosophy at St Andrew's, hearing of his necessity and his merit, afforded him a temporary relief. He now became the pupil of John Maiz, a celebrated teacher in the same university, under whom he studied the subtilties of logic; and contracting an attachment

to his master, he followed him to Paris. There, after having encountered many difficulties, he was invited to teach grammar in the college of St Barbe. In this slavish occupation he was found by the earl of Cassels; with whom having remained five years at Paris, he returned into Scotland. He next acted as preceptor to the famous earl of Murray, the natural son of James V. But while he was forming this nobleman for public affairs, he found that his life was in danger; and from enemies, whose vindictive rage could suffer no abatement, and who would not scruple the most dishonourable means of gratifying it.

The scandalous lives of the clergy had, it seems, excited his indignation; and, more than reasoning or argument, had estranged him from the errors of Popery. The Franciscan monks, in return to the beautiful but poignant satires he had written against them, branded him with the appellation of *atheist*; a term which the religious of all denominations are too apt indiscriminately to lavish where they have conceived a prejudice; and, not satisfied with the outrage of abuse and calamity, they conspired his destruction. Cardinal Beaton gave orders to apprehend him, and bribed king James with a very considerable sum to permit his execution. He was seized upon accordingly; and the first genius of his age was about to perish by the halter, or by fire, to satisfy a malignant resentment, when, escaping the vigilance of his guards, he fled into England. Henry VIII. at all times the slave of caprice and passion, was then burning, on the same day, and at the same stake, the Lutheran and the Papist. His court did not suit a philosopher or a satyr. After a short stay, Buchanan crossed the sea to France; and, to his extreme disappointment, found, at Paris, cardinal Beaton, as ambassador from Scotland. He retired privately to Bourdeaux, dreading, perhaps, new misfortunes, and concerned that he could not prosecute his studies in obscurity and in silence. Here he met Andrew Govea, a Portuguese of great learning and worth, with whom he had formerly been acquainted during his travels, and who was now employed in teaching a public school. He disdained not to act as the assistant of his friend; and during the three years he resided at this place, he composed the tragedies which do him so much honour. It was here, also, that he wrote some of the most pleasant of those poems, in which he has rallied the muses, and threatened to forsake them, as not being able to maintain their votary. About this time, too, he presented a copy of verses to the emperor Charles V. who happened to pass through Bourdeaux.

His enemies, mean while, were not inactive. Cardinal Beaton wrote about him to the archbishop of Bourdeaux; and by every motive which a cunning and a wicked heart can invent, he invited him to punish the most pestilential of all heretics. The archbishop, however, was not so violent as the cardinal. On enquiring into the matter, he was convinced that the poet had committed a very small impropriety; and allowed himself to be pacified. But fortune was not long to continue her smiles. Andrew Govea being called by the king of Portugal, his master, to establish an academy at Coimbra, he intreated Buchanan to accompany him. He obtained his request; and had not been a year

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Buchanan. year in his own country, when he died, and left his associate exposed to the malice of his inveterate enemies the monks. They loudly objected to him, that he was a Lutheran; that he had written poems against the Franciscans; and that he had been guilty of the abominable crime of eating flesh in lent. He was confined to a monastery till he should learn what these men fancied to be religion: and they enjoined him to translate the Psalms of David into Latin verse; a task which every man of taste knows with what admirable skill and genius he performed.

On obtaining his liberty, he had the offer of a speedy promotion from the king of Portugal; the issue of which, his aversion to the clergy did not allow him to wait. He hastened to England; but the perturbed state of affairs during the minority of Edward VI. not giving him the promise of any lasting security, he set out for France. There he had not been long, when he published his Jephtha, which his necessities made him dedicate to the marshal de Brissac. This patron did not want generosity, and could judge of merit. He sent him to Piedmont, as preceptor to his son Timoleon de Cossi. In this employ he continued several years; and during the leisure it afforded him, he fully examined the controversies which now agitated Europe; and he put the last hand to many of the most admired of his smaller poems.

When his pupil had no longer any use for him, he passed into Scotland, and made an open profession of the reformed faith. But he soon quitted his native country for France; which appears to have been more agreeable to his taste. Queen Mary, however, having determined that he should have the charge of educating her son, recalled him: and till the prince should arrive at a proper age, he was nominated to the principality of St Andrew's. His success as James's preceptor is well known. When it was reproached to him, that he had made his majesty a pedant; "It is a wonder (he replied) that I have made so much of him." Mackenzie relates a story concerning his tutelage of his pedantic majesty, which is strongly expressive of Buchanan's character as a man of humour, and at the same time shows the degree of his veneration for royalty. The young king being one day at play with his fellow-pupil the master of Erskine, Buchanan, who was then reading, desired them to make less noise. Finding that they disregarded his admonition, he told his majesty, if he did not hold his tongue, he would certainly whip his breech. The king replied, he would be glad to see who would *bell the cat*, alluding to the fable. Buchanan, in a passion, threw the book from him, and gave his majesty a sound flogging. The old countess of Mar, who was in the next apartment, rushed into the room, and taking the king in her arms, asked how he dared to lay his hand on *the Lord's anointed*, "Madam (says Buchanan), I have whipped his a—; you may kiss it, if you please."

On the misfortunes that befel the amiable but imprudent Mary, he went over to the party of the earl of Murray; and at his earnest desire he was prevailed upon to write his "Detection," a work which his greatest admirers have read with regret. Having been sent with other commissioners to England, against his mistress, he was, on his return, rewarded with the abbacy of Cross Raguel; made director to the chancery;

and some time after lord of the privy council and privy seal. He was likewise rewarded by queen Elizabeth with a pension of 100l. a-year. The twelve last years of his life he employed in composing his History of Scotland. After having vied with almost all the more eminent of the Latin poets, he contested with Livy and Sallust the palm of eloquence and political sagacity. But it is to be remembered with pain, that, like the former of these historians, he was not always careful to preserve himself from the charge of partiality. In the year 1582, he expired at Edinburgh, in the 76th year of his age.

Various writers who have mentioned this author, speak of him in very different language, according to their religious and political principles. From his works, however, it is evident, that, both as a Latin poet and prose writer, he hath rarely been equalled since the reign of Augustus; nor is he less deserving of remembrance as a friend to the natural liberties of mankind, in opposition to usurpation and tyranny. "The happy genius of Buchanan (says Dr Robertson), equally formed to excel in prose and in verse, more various, more original, and more elegant, than that of almost any other modern who writes in Latin, reflects, with regard to this particular, the greatest lustre on his country." To his memory an obelisk 100 feet high is at this time (1788) erecting by subscription, at Killearn the place of his nativity, designed by Mr J. Craig nephew to the celebrated poet Thomson.

The following is a list of his works. 1. *Rerum Scotticarum*, &c. 2. *Psalmorum Davidis paraphrasis poetica*. 3. *De jure regni apud Scotos Dialogus*. 4. *Psalmus civ. cum judicio Barclaii*, &c. 5. *Psalmus cxx. cum analysi organica Beuzeri*. 6. *Baptistes, sive Calumnia*. 7. *Alcastris, tragedia*. 8. *Tragedia sacra, et extera*. 9. *De Caletto recepto carmen, apud Stephan.* 10. *Franciscanus et Fratres*, &c. 11. *Elegia, Silvæ*, &c. 12. *De sphaera Herbornæ*. 13. *Poemata*. 14. *Satyra in cardinalem Lotharingium*. 15. *Rudimenta grammatices, Tho. Linacri ex Anglico sermone in Latinum versa*. 16. An admonition to the true lords. 17. *De prosodia*. 18. *Chamaleon*, 1572. 19. *Ad viros sui seculi epistola*. 20. *Literæ reginæ Scoticæ ad com. Bothwelliæ*. 21. A detection of the doings of Mary queen of Scots, and of James earl of Bothwell, against Henry lord Darnly. 22. *Vita ab ipso scripta biennio ante mortem, cum commentario D. Rob. Sibbaldi, M. D.* 23. Life of Mary queen of Scots. These have been severally printed often, and in various countries. An edition of them all collected together was printed at Edinburgh in 1704, in 2 vols folio.

BUCHANNESS, a cape or promontory of Scotland, which is the farthest point of Buchan, not far from Peterhead, and the most eastern of all Scotland. E. Long. 0. 30. N. Lat. 57. 28.

BUCHAW, a free and imperial town of Germany, in Suabia, seated on the river Tedersee, 22 miles south-west of Ulm. Here is a monastery, whose abbess has a voice in the diets of the empire. E. Long. 9. 37. N. Lat. 48. 5.

BUCHAW, a small territory of Germany, in the circle of the Upper Rhine, which comprehends the district of the abbot of Flud.

BUCHOREST, a pretty large town of Turkey, in Europe, seated in the middle of Walachia, and the ordinary

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dinary residence of a hospodar. The houses are mean and very ill built, except a few that belong to the principal persons. In 1716, a party of Germans sent from Transylvania entered this town, and took the prince prisoner with all his court, and carried them off. This expedition was the more easily performed, as several lords of the country had a secret intelligence with the governor of Transylvania. This prince had no other way to regain his liberty, but by giving up that part of Walachia, which lies between the river Aluth and Transylvania, to the emperor of Germany, by the peace concluded at Passarowitz in 1718. The Germans entered again into the capital of his dominions, and levied excessive contributions. But affairs took another turn after the fatal battle of Crotzka in 1737; for the emperor was obliged to restore this part of Walachia to the hospodar, in virtue of the treaty of Belgrade. E. Long. 26. 30. N. Lat. 44. 30.

BUCHOM, a small, free, and imperial town of Suabia in Germany, seated on the lake of Constance, in E. Long. 9. 20. N. Lat. 47. 41.

BUCIOCHE, in commerce, a sort of woollen cloth manufactured in Provence in France, which the French ships carry to Alexandria and Cairo.

BUCK, in zoology, a male horned beast of venery or chase, whose female is denominated a *doe*. See CERVUS, and *Buck-HUNTING*.

BUCK, is also applied to the males of the hare and rabbit kind. See LEPUS, and *Hare-HUNTING*.

Buck-Bean, in botany. See MENYANTHES.

Buck-Thorn, the English name of the RHAMNUS.

Buck-Wheat. See POLYGONUM.

BUCKENHAM (New), a town of Norfolk in England, which formerly had a strong castle, but now demolished. It is seated in a flat, in E. Long. 1. 10. N. Lat. 52. 30.

BUCKET, a small portable vessel to hold water, often made of leather for its lightness and easy use in cases of fire.—It is also the vessel let down into a well, or the sides of ships, to fetch up water.

BUCKING, the first operation in the whitening of linen yarn or cloth. See BLEACHING.

BUCKINGHAM, the chief town of Buckinghamshire in England, stands in a low ground, on the river Ouse, by which it is almost surrounded, and over which there are three handsome stone-bridges. The town is large and populous, sends two members to parliament, and had the title of a duchy. It seems, however to have been but an inconsiderable place at the conquest; for according to Doomsday-book, it paid only for one hide, and had but 26 burghesses. Edward the elder fortified it in the year 918 against the incursions of the Danes, with a rampart and turrets. It also had formerly a castle in the middle of the town, of which no vestiges now remain. The shrine of St Rumbald, the patron of fishermen, preserved in the church, was held in great veneration. The county-gaol stands in this town, and here the assizes are sometimes kept. It was formerly a staple for wool, but that advantage it hath now lost. It is governed by a bailiff and 12 burghesses, who are the sole electors of the members. In its neighbourhood are many paper-mills upon the Ouse. W. Long. 0. 58. N. Lat. 51. 30.

BUCKINGHAM-Shire (supposed to derive its name from the Saxon word *Buc*, denoting a hart or buck),

an inland county of England. During the time prior to the landing of the Romans it was included in the division of Catieuchlani; and after their conquest it was included in their third province of Flavia Cæsariensis. During the heptarchy it belonged to the kingdom of Mercia, which commenced in 582, and terminated in 827, having had 18 kings; and it is now included in the Norfolk circuit, the diocese of Lincoln, and the province of Canterbury. It is bounded on the north by Northamptonshire; south by Berkshire; east by Bedfordshire, Hertfordshire, and Middlesex; and west by Oxfordshire. It is of an oblong form, whose greatest extent is from north to south. It contains 441,000 acres, has above 111,400 inhabitants, 185 parishes, 73 vicarages, is 39 miles long, 18 broad, and 109 in circumference. It has 15 market towns, viz. Buckingham and Aylesbury the county towns, Marlow, Newport Pagnel, Winslow, Wendover, Beaconsfield, Wiccomb, Chessham, Amersham, Stony Stratford, Colnbrook, Ivingho, Oulney, Risborough; besides the considerable villages of Eaton and Fenny Stratford, and 613 others inferior. It is divided into eight hundreds, provides 560 men for the militia, sends 14 parliament-men, and pays 12 parts of the land-tax. Its rivers are the Thames, Ouse, Coln, Wicham, Amersham, Isa, Tame, and Loddon. Its chief produce is bone-lace, paper, corn, fine wool, and breeding rams. The most noted places are the Chiltern Hills, Vale of Aylesbury, Bernwood-Forest, Wooburn-Heath, and 15 parks. The air is generally good, and the soil mostly chalk or marle.

BUCKINGHAM (George Villiers duke of). See VILLIERS.

BUCKINGHAM (John Sheffield duke of). See SHEFFIELD.

BUCKLE, a well known utensil, made of divers sorts of metals, as gold, silver, steel, brass, &c.

The fashion or form of buckles is various; but their use, in general, is to make fast certain parts of dress, as the shoes, garters, &c.

BUCKLE, in heraldry. The buckle was so much esteemed in former times, that few persons of repute and honour wore their girdle without it; and it may be considered, in coats of arms, as a token of the surety, the faith, and service of the bearer.

BUCKLER, a piece of defensive armour used by the ancients. It was worn on the left arm; and composed of wickers woven together, or wood of the lightest sort, covered with hides, and fortified with plates of brass or other metal. The figure was sometimes round, sometimes oval, and sometimes almost square. Most of the bucklers were curiously adorned with all sorts of figures of birds and beasts, as eagles, lions; nor of these only, but of the gods, of the celestial bodies, and all the works of nature; which custom was derived from the heroic times, and from them communicated to the Grecians, Romans, and Barbarians.

The scutum, or Roman buckler, was of wood, the parts being joined together with little plates of iron, and the whole covered with a bull's hide. An iron plate went about it without, to keep off blows; and another within, to hinder it from taking any damage by lying on the ground. In the middle was an iron boss or *umbo* jutting out, very serviceable to glance off stones and darts; and sometimes to press violently upon the

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the enemy, and drive all before them. They are to be distinguished from the clypei, which were less, and quite round, belonging more properly to other nations, though for some little time used by the Romans. The scuta themselves were of two kinds; the *ovata*, and the *imbricata*: the former is a plain oval figure; the other oblong, and bending inward like half a cylinder. Polybius makes the scuta four feet long, and Plutarch calls them *ποδῆταις*, reaching down to the feet. And it is very probable that they covered almost the whole body, since in Livy we meet with soldiers who stood on the guard, sometimes sleeping with their head on their shield, having fixed the other part of it in the earth.

Votive BUCKLERS: Those consecrated to the gods, and hung up in their temples, either in commemoration of some hero, or as a thanksgiving for a victory obtained over an enemy; whose bucklers, taken in war, were offered as a trophy.

BUCKOR, a province of Asia, subject to the great mogul. It is seated on the river Indus, on the banks of which there are corn and cattle; but the west part which is bounded by Sogdiana in Persia, is a desert. The inhabitants are strong, robust, and apt to mutiny; for which reason the mogul has a garrison at the chief town called *Buckor*, which is seated in an island made by the river Indus. They are all Mahometans, and drive a great trade in cotton cloth, and other Indian commodities. E. Long. 70. 5. N. Lat. 28. 20.

BUCKRAM, in commerce, a sort of coarse linen cloth stiffened with glue, used in the making of garments to keep them in the form intended. It is also used in the bodies of womens gowns; and it often serves to make wrappers to cover cloths, ferges, and such other merchandises, in order to preserve them, and keep them from the dust, and their colours from fading. Buckrams are sold wholesale by the dozen of small pieces or remnants, each about four ells long, and broad according to the piece from which they are cut. Sometimes they use new pieces of linen cloth to make buckrams, but most commonly old sheets and old pieces of sails.

BUCKSTALL, a toil to take deer, which must not be kept by any body that has not a park of his own, under penalties.

BUCOLIC, in ancient poetry, a kind of poem relating to shepherds and country affairs, which, according to the most generally received opinion, took its rise in Sicily. Bucolics, says Vossius, have some conformity with comedy. Like it, they are pictures and imitations of ordinary life; with this difference, however, that comedy represents the manners of the inhabitants of cities, and bucolics the occupations of country people. Sometimes, continues he, this last poem is in form of a monologue, and sometimes of a dialogue. Sometimes there is action in it, and sometimes only narration; and sometimes it is composed both of action and narration. The hexameter verse is the most proper for bucolics in the Greek and Latin tongues. Moschus, Bion, Theocritus, and Virgil, are the most renowned of the ancient bucolic poets.

BUD, in botany. See the article GEMMA.

BUDA, the capital city of Hungary, called *Ofen* by the inhabitants, and *Buden* by the Turks. It is large, well fortified, and has a castle that is almost im-

pregnable. The houses are tolerably handsome, being most of them built with square stone. It was a much finer place before the Turks had it in their possession; but they being masters of it 135 years, have suffered the finest buildings to fall to decay. The lower city, or Jews town, extends like suburbs from the upper city to the Danube. The upper town takes up all the declivity of a mountain; and is fortified with good walls, which have towers at certain distances. The castle, which is at the extremity of the hill, on the east side, and commands the greatest part of it, is surrounded with a very deep ditch, and defended by an old-fashioned tower, with the addition of new fortifications. There is also a suburb, inclosed with hedges, after the Hungarian manner. The most sumptuous structures now are the caravanseras, the mosques, bridges, and baths. These last are the finest in Europe, for the magnificence of the building, and plenty of water. Some of the springs are used for bathing and drinking; and others are so hot, that they cannot be used without a mixture of cold water. The Danube is about three quarters of a mile in breadth; and there is a bridge of boats between this city and Pest, consisting of 63 large pontoons. The Jews have a synagogue near the castle-gardens. The adjacent country is fruitful and pleasant, producing rich wines; though in some places they have a sulphureous flavour.

This city was the residence of the Hungarian monarchs, till the Turks took it in 1526. Ferdinand arch-duke of Austria recovered it the next year; but in 1529 the Turks became masters of it again. In 1684 the Christians laid siege to it; but they were obliged to raise it soon after, though they had an army of 80,000 men. Two years after, the Turks lost it again, it being taken by assault in the sight of a very numerous army. The booty that the Christians found there was almost incredible, because the rich inhabitants had lodged their treasury in this city as a place of safety. However, part of these riches were lost in the fire occasioned by the assault. This last siege cost the Christians a great deal of blood, because there were many in the camp who carried on a secret correspondence with the Turks. When the seraskier saw the city on fire, and found he could not relieve it, he beat his head against the ground for anger. In 1687, this city had like to have fallen into the hands of the Turks again by treachery. After this, the Christians augmented the fortifications of this place, to which the pope contributed 100,000 crowns, for this is looked upon as the key of Christendom. It is seated on the Danube, 105 miles south-east of Vienna, 163 north by west of Belgrade, and 563 north-west of Constantinople. E. Long. 19. 22. N. Lat. 47. 20.

BUDA (the beglerbeglic of), was one of the chief governments of the Turks in Europe. It included all the countries of Upper Hungary between the rivers Teisse and Danube, and between Agria and Novi-grad; all Lower Hungary, from Gran and Canisca, the eastern part of Sclavonia, and almost all Servia: but a good part of this government now belongs to the queen of Hungary.

BUDÆUS (William), the most learned man in France in the 15th century, was descended of an ancient and illustrious family, and born at Paris in 1467.

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Budding.

He was placed young under masters; but barbarism prevailed so much in the schools of Paris, that Budæus took a dislike to them, and spent his whole time in idleness, till his parents sent him to the university of Orleans to study law. Here he passed three years without adding to his knowledge; for his parents sending for him back to Paris, found his ignorance no less than before, and his reluctance to study, and love to gaming and other useless pleasures, much greater. They talked no more to him of learning of any kind; and as he was heir to a large fortune, left him to follow his own inclinations. He was passionately fond of hunting, and took great pleasure in horses, dogs, and hawks. The fire of youth beginning to cool, and his usual pleasures to pall upon his senses, he was seized with an irresistible passion for study. He immediately disposed of all his hunting equipage, and even abstracted himself from all business to apply himself wholly to study; in which he made, without any assistance, a very rapid and amazing progress, particularly in the Latin and Greek languages. The work which gained him greatest reputation was his treatise *de Assē*. His erudition and high birth were not his only advantages; he had an uncommon share of piety, modesty, gentleness, and good-breeding. The French king, Francis I. often sent for him; and at his persuasion, and that of Du Bellay, founded the royal college of France, for teaching the languages and sciences. The king sent him to Rome with the character of his ambassador to Leo X. and in 1522 made him master of requests. The same year he was chosen provost of the merchants. He died at Paris in 1540. His works, making four volumes in folio, were printed at Basil in 1557.

BUDDÆUS (John Francis), a celebrated Lutheran divine, and one of the most learned men Germany has produced, was born in 1667, at Anclam, a town of Pomerania, where his father was minister. He was at first Greek and Latin professor at Colburg; afterwards professor of morality and politics in the university of Hall; and at length, in 1705, professor of divinity at Jena, where he fixed, and where he died, after having acquired a very great reputation. His principal works are, 1. A large historical German dictionary. 2. *Historia ecclesiastica Veteris Testamenti*, 2 vols 4to. 3. *Elementa philosophiæ practicae, instrumentalis, et theoreticae*, 3 vols 8vo, which has had a great number of editions, because in most of the universities of Germany the professors take this work for the text of their lessons. 4. *Selecta juris naturæ et gentium*. 5. *Miscellanea sacra*, 3 vols 4to. 6. *Isagoge historico-theologica ad theologiam universam, singulasque ejus partes*, 2 vols 4to; which is much valued by the Lutherans. 7. A treatise on atheism and superstition.

BUDESDALE, or BETTISDALE, a town of Suffolk in England, seated in a dale or valley, and its street takes in a good part of Ricking, all which together make up the town, for of itself it is but a hamlet, having a small chapel, and an endowed grammar-school, to which belong certain scholarships, assigned to Bennet or Corpus Christi-college in Cambridge, being the gift of Sir Nicholas Bacon, lord keeper of the great seal. E. Long. 1. 8. N. Lat. 52. 25.

BUDDING, in gardening. See ENGRAFTING.

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BUDDLE, in mineralogy, a large square frame of boards, used in washing the tin-ore. Buddle

BUDDLEIA, in botany; a genus of the monogynia order, belonging to the tetrandria class of plants. The calyx and corolla are quadrid; the stamina placed at the incisures of the corolla. The capsule is bifurcated, bilocular, and polyspermous. There are two species, viz. the americana, and occidentalis. The first is a native of Jamaica and most of the other American islands; where it rises to the height of ten or twelve feet, with a thick woody stem covered with a grey bark; and sends out many branches towards the top, which come out opposite: at the ends of the branches the flowers are produced in long close spikes branching out in clusters, which are yellow, consisting of one leaf cut into four segments: these are succeeded by oblong capsules filled with small seeds. The second grows naturally at Carthagen; and rises much higher than the other, dividing into a great number of slender branches covered with a russet hairy bark, garnished with long spear-shaped leaves ending in sharp points: at the end of the branches are produced branching spikes of white flowers growing in whorls round the stalks, with small spaces between each.—These plants grow in gullies, or other low sheltered spots; their branches being too tender to resist the force of strong winds. They may be propagated by seeds procured from those places where they are natives; and are to be managed like other exotics: only their seeds must be sown in pots as soon as they arrive, and very lightly covered; for if they are buried deep in the earth they will all perish.

BUDELICH, a town of Germany, in the electoral circle of the Rhine and archbishopric of Treves, seated on the little river Traen, in E. Long. 6. 55. N. Lat. 49. 52.

BUDGE-BARRELS, among engineers, small barrels well hooped, with only one head; on the other end is nailed a piece of leather, to draw together upon strings like a purse. Their use is for carrying powder along with a gun or mortar; being less dangerous, and easier carried, than whole barrels. They are likewise used upon a battery of mortars for holding meal powder.

BUDGE (Eustace), Esq; an ingenious and polite writer, was the son of Gilbert Budgell, doctor of divinity; and was born at St Thomas, near Exeter, about the year 1685. He was educated at Christchurch college, Oxford; from which he removed to the Inner Temple, London: but instead of studying the law, for which his father intended him, he applied to polite literature; kept company with the genteel persons in town; and particularly contracted a strict intimacy with the ingenious Mr Addison, who was first cousin to his mother, and who, on his being made secretary to lord Wharton lord lieutenant of Ireland, took him with him as one of the clerks of his office. Mr Budgell, who was about 20 years of age, and had read the classics, and the works of the best English, French, and Italian authors, now became concerned with Sir Richard Steele and Mr Addison in writing the Tatler, as he had, soon after, a share in writing the Spectators, where all the papers written by him are marked with an X; and when that work was completed, he had likewise a hand in the Guardian, where his performances are marked with an asterisk.

5 D

risk.

Budgell. risk. He was afterwards made under-secretary to Mr Addison, chief secretary to the lords justices of Ireland, and deputy-clerk of the council. Soon after, he was chosen member of the Irish parliament; and in 1717, Mr Addison, having become principal secretary of state in England, procured him the place of accountant and comptroller general of the revenue in Ireland. But the next year, the duke of Bolton being appointed lord-lieutenant, Mr Budgell wrote a lampoon against Mr Webster, his secretary, in which his Grace himself was not spared; and upon all occasions treated that gentleman with the utmost contempt. This imprudent step was the primary cause of his ruin: for the duke of Bolton, in support of his secretary, got him removed from the post of accountant-general; upon which, returning to England, he, contrary to the advice of Mr Addison, published his case in a pamphlet, intitled, "A letter to the lord * * *, from Eustace Budgell, Esq; accountant-general," &c. Mr Addison had now resigned the seals, and was retired into the country for the sake of his health: Mr Budgell had also lost several other powerful friends, who had been taken off by death; particularly the lord Halifax and the earl of Sunderland: he, however, made several attempts to succeed at court, but was constantly kept down by the duke of Bolton. In the year 1720 he lost 20,000*l.* by the South-sea scheme, and afterwards spent 5000*l.* more in unsuccessful attempts to get into parliament. This completed his ruin. He at length employed himself in writing pamphlets against the ministry, and wrote many papers in the *Craftsman*. In 1733, he began a weekly pamphlet, called *The Bee*; which he continued for above 100 numbers, printed in eight volumes 8vo. During the progress of this work, Dr Tindal's death happened, by whose will Mr Budgell had 2000*l.* left him; and the world being surprised at such a gift from a man entirely unrelated to him, to the exclusion of the next heir, a nephew, and the continuator of Rapin's history of England, immediately imputed it to his making the will himself. Thus the satyrist:

Let Budgell charge low Grub-street on my quill,
And write whate'er he please except my will.

It was thought he had some hand in publishing Dr Tindal's *Christianity as old as the Creation*; for he often talked of another additional volume on the same subject, but never published it. After the cessation of the *Bee*, Mr Budgell became so involved in law-suits, that he was reduced to a very unhappy situation. He got himself called to the bar, and attended for some time in the courts of law; but finding himself unable to make any progress, and being distressed to the utmost, he determined at length to make away with himself. Accordingly, in the year 1736, he took a boat at Somerset-stairs, after filling his pockets with stones; ordered the waterman to shoot the bridge; and, while the boat was going under, threw himself into the river. He had several days before been visibly distracted in his mind. Upon his bureau was found a slip of paper, on which were these words:

What Cato did, and Addison approv'd,
Cannot be wrong.

Besides the above works, he wrote a Translation of

Theophrastus's Characters. He was never married; but left one natural daughter, who afterwards assumed his name, and became an actress in Drury-lane.

Budinus
||
Buena.

BUDINUS (anc. geog.), a mountain of Sarmatia Europæa, from which the more northern spring of the Borysthenes is said to take its rise, according to Ptolemy. But this is contradicted by later accounts. Now *Podolia*.

BUDNÆANS, in ecclesiastical history, so called from the name of their leader, Simon Budnæus. They not only denied all kind of religious worship to Jesus Christ, but asserted, that he was not begotten by any extraordinary act of divine power; being born, like other men, in a natural way. Budnæus was disposed from his ministerial functions in the year 1584, and publicly excommunicated, with all his disciples; but afterwards abandoning his peculiar sentiments, he was readmitted to the communion of the Socinian sect. Crellius ascribes the origin of the above opinion to Adam Neuser.

BUDOA, a maritime town of Dalmatia, with a bishop's see, subject to the Venetians. It is seated between the gulf of Cattaro and the city of Dulugno, on the coast of Albany; and is an important fortress, where the Venetians always keep a strong garrison. In 1667, it suffered greatly by an earthquake: and in 1686 was besieged by Soliman, basha of Scutari; but general Cornaro obliged him to raise the siege. E. Long. 19. 22. N. Lat. 42. 12.

BUDRIO, a town of Italy, in the Bolognese. The adjacent fields produce large quantities of fine hemp, which renders the town of more consequence than larger places. E. Long. 11. 35. N. Lat. 44. 27.

BUDUN, is the name of one of the Ceylonesse gods: he is supposed to have arrived at supremacy, after successive transmigration from the lowest state of an insect, through the various species of living animals. There have been three deities of this name, each of which is supposed to reign as long as a bird removes a hill of sand, half a mile high, and six miles round, by a single grain in a thousand years. See *SAKRADAWENDRA*.

BUDWEIS, a royal city of Bohemia in Germany. It is pretty large and well built, surrounded with strong walls, fortified with a good rampart, and might be made an important place. It was taken by the king of Prussia in 1744, but he did not keep it very long. E. Long. 14. 19. N. Lat. 42. 15.

BUDZIAC TARTARY, lies on the rivers Neister, Bog, and Nieper; having Poland and Russia on the north, Little Tartary on the east, the Black Sea on the south, and Bessarabia on the west. The chief town is Oczakow. It is subject to Turkey.

BUENA VISTA, one of the Cape de Verd Islands, lying in N. Lat. 15. 56. It is also called *Bonvista*, and *Bonnevue*; but the first is the true appellation, the others being only abbreviations and corruptions of the original name, which signifies a *good prospect*, intimating the beautiful appearance it makes to ships at sea. This island is reckoned near 20 leagues in circumference, and is distinguished on the north side by a ridge of white rocks that bound it. The coast that stretches east and north-west is terminated with sundry banks to the sea; but the interior part is chiefly mountainous. From the northern point there is a large ridge.

Buenos
||
Buff.

ridge of rocks projecting near a whole league into the sea, against which the waves break with incredible fury. Another point of rocks stretches into the sea on the southern point of the island eastward, a league and a half beyond that point; and in that bay is the best road for shipping.

BUENOS AYRES, a country of South America, belonging to the Spaniards. This name, given from the pleasantness of the climate, is extended to all that country lying between Tucuman on the east, Paraguay on the north, and Terra Magellanica on the south, or to the vertex of that triangular point of land which composes South America. The country is watered by the great river La Plata; first discovered in 1515 by Juan Diaz de Solis, who with two of his attendants was massacred by the natives; and partly subdued by Sebastian Gaboto, who gave the great river the appellation of *La Plata*, from the abundance of the precious metals he procured from the inhabitants, imagining them to be the produce of the country, though in fact they were brought from Peru.—No country in the world abounds more in horned cattle and horses than Buenos Ayres, where the greatest expence of a horse or cow is in the catching it, and they are frequently to be had at the small price of two or three reals. In such abundance are these useful animals, that the hide alone is deemed of any value, as this constitutes a main article in the trade of the country. All rove wild in the fields; but they are now become more difficult of access, the terrible havock made among them having taught the cautious brutes to keep at a greater distance. All kinds of fish are in the same abundance; the fruits produced by every quarter of the globe grow up here in the utmost perfection; and for the enjoyment of life, and the salubrity of the air, a finer country cannot be imagined. The principal cities are Buenos Ayres the capital, Monte Video, Corienteo, and Santa Fe.

BUENOS Ayres (Neutra Sennora de), the capital of the country called *Buenos Ayres*, in South America, was founded in the year 1535, under the direction of Don Pedro de Mendoza, at that time governor. It stands on a point called *Cape Blanco*, on the south side of the Plata, fronting a small river, on S. Lat. 34° 34' 38", according to the observations of Father Ferville. The situation is in a fine plain, rising by a gentle ascent from the river; and truly paradisaical, whether we regard the temperature of the climate, the fertility of the soil, or that beautiful verdure which overspreads the whole face of the country, of which the inhabitants have a prospect as far as the eye can reach. The city is very considerable in extent, containing 3000 houses, inhabited by Spaniards and others of different complexions. The streets are straight, broad, and pretty equal in the heights and dimensions of the buildings; one very handsome square adorns it, the front being a castle in which the governor holds his court, and presides over a garrison of 3000 soldiers. Most of the buildings are of chalk or brick, except the cathedral, a magnificent structure, composed chiefly of stone.

BUFALMACO (Boramico), an Italian painter; the first who put labels to the mouths of his figures, with sentences; since followed by bad masters, but more frequently in caricatura engravings. He died in 1340.

BUFF, in commerce, a sort of leather prepared from

the skin of the buffalo; which dressed with oil, after the manner of shammy, makes what we call *buff-skin*. This makes a very considerable article in the French, English, and Dutch commerce at Constantinople, Smyrna, and all along the coast of Africa. The skins of elks, oxen, and other like animals, when prepared after the same manner as that of the buffalo, are likewise called *buffs*.

Of buff-skin, or buff-leather, are made a sort of coats for the horse or *gens d'armes* of France, bandaliers, belts, pouches, and gloves.

In France, there are several manufactories designed for the dressing of those sorts of hides, particularly at Corbeil, near Paris; at Niort, at Lyons, at Rone, at Etanepus, at Cone.

BUFFALO, in zoology. See Bos.

BUFFET was anciently a little apartment, separated from the rest of the room by slender wooden columns, for the disposing of china, glass-ware, &c.

It is now properly a large table in a dining-room, called also a *side board*, for the plate, glasses, bottles, basons, &c. to be placed on, as well for the service of the table as for magnificence. In houses of persons of distinction in France, the buffet is a detached room, decorated with pictures relative to the subject, with fountains, cisterns, and vases. It is commonly faced with marble or bronze.

BUFFIER (Claude), a French writer, in 1661, became a Jesuit in 1679, and died at Paris in 1737. There are many works of this author, which show deep penetration and accurate judgment; the principal of which is, "*Un Cours des Sciences*," &c. that is, "*a Course of Sciences upon principles new and simple, in order to form language, the understanding, and the heart, 1732*," in folio. This collection includes an excellent "*French grammar upon a new plan; a philosophic and practical treatise upon eloquence; an art of poetry*," which, however, is not reckoned the best part of this miscellany; "*elements of metaphysics; an examination into vulgar prejudices; a treatise of civil society; and an exposition of the proofs of religion*:" all full of reflections, just as well as new. He was the author of other works, in verse and prose, of which no great account is had; and it is remarkable, that his style in both is rather easy than accurate and correct, notwithstanding the precepts in his "*Grammar*," which is really philosophic.

BUFFON (Count de). See CLERC.

BUFFOON, a droll, or mimic, who diverts the public by his pleasantries and follies. Menage, after Salmastius, derives the word from *buffo*; a name given to those who appeared on the Roman theatre with their cheeks blown up; that, receiving blows thereon, they might make the greater noise, and set the people a laughing. Others, as Rhodiginus, makes the origin of buffoonery more venerable; deriving it from a feast instituted in Attica by K. Erichtheus, called *buphonia*.

Buffoons are the same with what we otherwise find denominated *scurrae*, *gelasiani*, *mimilogi*, *ministrelli*, *goliardi*, *joculatores*, &c. whose chief scene is laid at the tables of great men. Gallienus never sat down to meat without a second table of buffoons by him; Tilletmont also renders *pantomimes* by buffoons. In which sense he observes, the shows of the buffoons were taken

Buffalo
||
Buffoon.

Bufonia
||
Bug.

away by Domitian, restored by Nerva, and finally abolished by Trajan.

BUFONIA, TOAD-GRASS: A genus of the monogynia order, belonging to the diandria class of plants; and in the natural method ranking under the 22d order, *Caryophyllæa*. The calyx is quinque-dentate; there is no corolla; the berry is monospermous. There is but one species, *viz.* the *tenuifolia*, a native of Britain.

BUFONITA, in natural history, the toad-stone. This has been received not only among the list of native stones by the generality of authors, but even has held a place among the gems, and is still worn in rings by some people; though undoubtedly it is an extraneous fossil. There has been a strong opinion in the world, that it was found in the head of an old toad; and that this animal voided it at the mouth, on being put on a red cloth. The general colour of the bufonitæ is a deep dusky brown; but it varies greatly in this respect in several specimens, some of which are quite black, others of an extremely pale simple brown, a chestnut colour, liver colour, black grey, or whitish. The bufonitæ are usually found immersed in beds of stone; and so little doubt is there of what they have originally been, *viz.* the petrified teeth of the *lupus piscis*, or wolf-fish, that part of the jaw of the fish has sometimes been found with the teeth petrified in it. The bufonitæ are said to be cordial and astringent: many other fanciful virtues are ascribed to them, which the present practice has rejected.

BUG, or BUGG, in zoology, the English name of a species of cimex. See **CIMEX**.

Cheap, easy, and clean mixture for effectually destroying Buggs. Take of the highest rectified spirit of wine, (*viz.* lamp-spirits) that will burn all away dry, and leave not the least moisture behind it, half a pint; new distilled oil, or spirit, of turpentine, half a pint: mix them together; and break into it, in small bits, half an ounce of camphire, which will dissolve it in a few minutes; shake them well together; and with a piece of sponge, or a brush dipt in some of it, wet very well the bed or furniture wherein those vermin harbour and breed, and it will infallibly kill and destroy both them and their nits, although they swarm ever so much. But then the bed and furniture must be well and thoroughly wet with it (the dust upon them being first brushed and shook off), by which means it will neither soil, stain, nor in the least hurt, the finest silk or damask bed that is. The quantity here ordered of this mixture (that costs but about a shilling) will rid any one bed whatever, tho' it swarms with buggs. If any buggs should happen to appear after once using it, it will only be for want of well wetting the lacing, &c. of the bed, or the folding of the linens or curtains near the rings, or the joints or holes in and about the bed or head-board, wherein the buggs and nits nestle and breed; and then their being wetted all again with more of the same mixture, which dries in as fast as you use it, pouring some of it into the joints and holes where the brush or sponge cannot reach, will never fail absolutely to destroy them all. Some beds that have much wood-work can hardly be thoroughly cleared without being first taken down; but others that can be drawn out, or that you can get well behind, to be done as it should be, may. The smell this mixture occasions will be all gone in two or three days; which yet is very wholesome, and to many people agreeable.

Remember always to shake the mixture together very well whenever you use it, which must be in the daytime, not by candle-light, lest the subtlety of the mixture should catch the flame as you are using it, and occasion damage.

Early in the spring, even in February, the larva of these creatures begins to burst from the egg; and it is at this season that attention is so very requisite. The bed ought to be stripped of all its furniture; which should be washed, and even boiled, if linen; if stuff, it should be hot-pressed. The bedstead should be taken to pieces, dusted, and washed with spirit of wine in the joints; for in those parts the females lay their eggs. This done, the joints, crevices, cavities, &c. should be well filled with the best soft soap mixed with verdigris and Scots snuff. On this substance the larva, if any escape the cleansing, or any, which is common in old houses, creep into the bedstead, will feed at first, and of course be destroyed: this last will effect the purpose in houses where these vermin are not so numerous, by repeating the operation every three months.—Professor Kalm[†] mentions, that, from repeated trials, he[†] has been convinced that sulphur, if it be properly employed, entirely destroys buggs and their eggs in beds or walls, though they were ten times more numerous than the ants on an ant-hill. His translator, Dr Forster, adds, that a still more effectual remedy is, to wash all the infected furniture with a solution of arsenic. See further the article **CIMICIFUGA**.

BUGEY, a province of France, bounded on the east by Savoy, on the west by Bresse, on the south by Dauphiny, and on the north by the territory of Gex and the Franche Compté. It is about 40 miles long and 25 broad. Though it is a country full of hills and rivers, yet it is fertile in some places, the rivers abound with trouts, and there are plenty of all sorts of game. The chief places are Belley the capital, Seisel, St Rambert, Fort l'Ecluse, and Chateau-Neuf.

BUGGERS, *Bulgarii*, anciently signified a kind of heretics, otherwise called *Paterini*, *Cathari*, and *Albigenses*.

The word is formed of the French *Bougres*, and that from *Bougria* or *Bulgaria*, the country where they chiefly appeared. Among other errors, they held, that men ought to believe no scripture but the New Testament; that baptism was not necessary to infants; that husbands who conversed with their wives could not be saved; and that an oath was absolutely unlawful. They were strenuously refuted by Fr. Robert, a Dominican, surnamed the *Bugger*, as having formerly made profession of this heresy.

The Buggers are mentioned by Matthew Paris, in the reign of Henry III. under the name of *Bugares*. *Circa dies autem illos invaluit heretica pravitas eorum qui vulgariter dicuntur Paterini & Bugares, de quorum erroribus malo tacere quam loqui.*

BUGGER, or BUGGERER, came afterwards to be used for a Sodomite; it being one of the imputations laid, right or wrong, on the Bulgarian heretics, that they taught, or at least practised, this abominable crime.

BUGGER (*Bulgarius*), is also a denomination given to usurers; usury being a vice to which the same heretics are said to have been much addicted.

BUGGERY, or SODOMY, is defined by Sir Edward Coke to be a carnal copulation against nature, either

Bugger
||
Buggery.

† Travels into
America.

Bugia
||
Building.

† Levit. xx.
13, 14.

ther by a confusion of species, that is to say, either a man or woman with a brute beast; or sexes, as a man with a man, or a man unnaturally with a woman. It is said this sin against God and nature was first brought into England by the Lombards. As to its punishment, the voice of nature and of reason, and the express law of God †, determines it to be capital. Of this we have a signal instance, long before the Jewish dispensation, by the destruction of two cities by fire from heaven; so that this is an universal, not merely a provincial, precept. Our ancient law, in some measure, imitated this punishment, by commanding such miscreants to be burnt to death; though Fleta says, they should be buried alive; either of which punishments was indifferently used for this crime among the ancient Goths. But now the general punishment of all felonies is the same, namely, by hanging: and this offence (being in the times of Popery only subject to ecclesiastical censures) was made felony without benefit of clergy by statute 25 Hen. VIII. c. 6. revived and confirmed by 5 Eliz. c. 17. And the rule of law herein is, that, if both parties are arrived at the years of discretion, *agentes et consentientes pari poena plectantur*, "both are liable to the same punishment."

BUGIA, a province of the kingdom of Algiers in Africa. It is almost surrounded with mountains; and is divided into three parts, Benijubar, Auraz, and Labez. These mountains are peopled with the most ancient Arabs, Moors, or Saracens. The province is very fertile in corn.

BUGIA, by the Africans called *Bugeiab*, a maritime town of Africa, in the kingdom of Algiers, and once the capital of the province of that name. It is supposed to be the *Salda* of Strabo, built by the Romans. It hath a handsome port formed by a narrow neck of land running into the sea; a great part of whose promontory was formerly faced with a wall of hewn stone; where was likewise an aqueduct, which supplied the port with water, discharging it into a capacious basin; all which now lie in ruins. The city itself is built on the ruins of a large one, at the foot of a high mountain that looks towards the north-east; a great part of whose walls run up quite to the top of it; where there is also a castle that commands the whole town, besides two others at the bottom, built for a security to the port. The inhabitants drive a considerable trade in ploughshares, mattocks, and other iron tools, which they manufacture from the neighbouring mines. The town is watered by a large river, supposed to be the *Nasava* of Ptolemy. The place is populous, and hath a considerable market for iron work, oil, and wax, which is carried on with great tranquillity; but is no sooner over than the whole place is in an uproar, so that the day seldom concludes without some flagrant instance of barbarity. E. Long. 4. N. Lat. 35. 30.

BUGIE, a town of Egypt, situated on the western shore of the Red Sea almost opposite to Ziden, the port-town to Mecca, and about 100 miles west of it. E. Long. 36. N. Lat. 22. 15.

BUGLE, in botany. See *AJUGA*.

BUGLOSS, in botany. See *ANCHUSA*.

Vipers BUGLOSS, in botany. See *ECHIUM*.

BUILDING, a fabric erected by art, either for devotion, magnificence, or conveniency.

BUILDING is also used for the art of constructing

and raising an edifice; in which sense it comprehends as well the expences as the invention and execution of the design. See *ARCHITECTURE*.

The modern buildings are much more commodious, as well as beautiful, than those of former times. Of old they used to dwell in houses, most of them with a blind stair case, low ceilings, and dark windows; the rooms built at random, without any thing of contrivance, and often with steps from one to another; so that one would think the people of former ages were afraid of light and fresh air: whereas the genius of our times is altogether for light stair-cases, fine sash-windows, and lofty ceilings. And such has been our builders industry in point of compactness and uniformity, that a house after the new way will afford, on the same quantity of ground, almost double the conveniences which could be had from an old one.

By act 11 Geo. I. and 4 Geo. III. for the regulation of building within the weekly bills of mortality, and in other places therein specified, party walls are required to be erected of brick or stone, which shall be two bricks and a half thick in the cellar, two bricks thick upwards to the garret floor, &c. and other limitations are enacted respecting the disposition of the timbers, &c. And every building is to be surveyed; and the person who offends against the statute in any of the particulars recited, is liable to a forfeit of 250 l. to be levied by warrant of justices of the peace. The other principal statutes relating to building are 19 Car. II. c. 3. 22 Car. II. c. 11. 5 Eliz. c. 4. 35 Eliz. c. 6. 6 Ann. c. 31. 7 Ann. c. 17. 33 Geo. II. c. 30. and 6 Geo. III. c. 37.

BUILDING of Ships. See *SHIP-BUILDING*.

BUILTH, or BEALT, a town of South-Wales in Brecknockshire, pleasantly seated on the river Wye, over which there is a wooden bridge that leads into Radnorshire. W. Long. 3. 10. N. Lat. 52. 8.

BUIS, a territory of France, in Dauphiny. It is a small mountainous country, but pretty fertile; and Buis and Nions are the principal places.

BUKARI, a small well-built town of Hungarian Dalmatia, situated on the Golfo di Bikeriza, in E. Long. 20. 53. N. Lat. 45. 20.

BUKHARIA, a general name for all that vast tract of land lying between Karazm and the great Kobi, or sandy desert bordering on China. It derives its name of *Bukharia* from the Mogul word *Bukbar*, which signifies a learned man; it being formerly the custom for those who wanted instruction in the languages and sciences to go into Bukharia. Hence this name appears to have been given to it by the Mogul, who under Jenghiz Khan conquered the country. It is nearly the same with that called by the Arabs *Mawaralnahr*, which is little other than a translation of the word *Transoxana*, the name formerly given to those provinces.

This region is divided into Great and Little Bukharia.

Great Bukharia (which seems to comprehend the *Sogdiana* and *Bactriana* of the ancient Greeks and Romans with their dependencies) is situated between the 34th and 46th degrees of north latitude, and between the 76th and 92d degrees of east longitude. It is bounded on the north by the river *Sir*, which separates it from the dominions of the *Eluths* or *Kalmucs*.

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Building
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Bukharia.

Bukharia. the kingdom of *Kashgar* in Little Bukharia, on the east; by the dominions of the great Mogul and Persia on the south; and by the country of Karazm on the west: being about 770 miles long from west to east, and 730 miles broad from south to north. It is an exceeding rich and fertile country; the mountains abound with the richest mines; the valleys are of an astonishing fertility in all sorts of fruit and pulse; the fields are covered with grass the height of a man; the rivers abound with excellent fish; and wood, which is scarce over all Grand Tartary, is here in great plenty. But all these benefits are of little use to the Tartar inhabitants, who are naturally so lazy, that they would rather go rob and kill their neighbours than apply themselves to improve the benefits which nature so liberally offers them. This country is divided into three large provinces, viz. Bukharia proper, Samarcand, and Balk; each of which generally has its proper khan. The province of Bukharia proper is the most western of the three; having on the west Karazm, on the north a desert called by the Arabs *Gaznah*, on the east the province of Samarcand, and on the south the river Amu. It may be about 390 miles long, and 320 broad. The towns are Bokhara, Zam, Wardsi, Karakul, Siunjbala, Karshi, Zarjui, Nersim, Karmina, &c.

Little Bukharia is so called, not because it is less in dimensions than the other, for in reality it is larger; but because it is inferior to it as to the number and beauty of its cities, goodness of the soil, &c. It is surrounded by deserts: it has on the west, Great Bukharia; on the north, the country of the Kalmucs; on the east, that of the Moguls subject to China; on the south, Thibet, and the north-west corner of China. It is situated between the 93d and 118th degrees of east longitude, and between 35° 30' and 45° of north latitude; being in length from east to west about 850 miles, and in breadth from north to south 580: but if its dimensions be taken according to its semicircular course from the south to the north-east, its length will be 1200 miles. It is sufficiently populous and fertile; but the great elevation of its land, joined to the height of the mountains which bound it in several parts, particularly towards the south, renders it much colder than from its situation might naturally be expected. It is very rich in mines of gold and silver; but the inhabitants reap little benefit by them, because neither the Eluths nor Kalmucs, who are masters of the country, nor the Bukhars, care to work in them. Nevertheless, they gather abundance of gold from the beds of the torrents formed by the melting of the snow in the spring; and from hence comes all that gold dust which the Bukhars carry into India, China, and Siberia. Much musk is likewise found in this country; and all sorts of precious stones, even diamonds; but the inhabitants have not the art of either cutting or polishing them.

The inhabitants both of Great and Little Bukharia, are generally those people called *Bukhars*. They are commonly sun-burned and black-haired; although some of them are very fair, handsome, and well made. They do not want politeness, and are addicted to commerce; which they carry on with China, the Indies, Persia, and Russia: but those who deal with them will be sure of being over-reached, if they do not take great care. The

habits of the men differ very little from those of the *Bukharia*. Tartars. Their girdles are like those of the Poles. The garments of the women differ in nothing from those of the men, and are commonly quilted with cotton. They wear bobs in their ears 12 inches long; part and twist their hair in tresses, which they lengthen with black ribbands embroidered with gold or silver, and with great tassels of silk and silver, which hang down to their heels; three other tufts of a smaller size cover their breasts. Both sexes carry about with them prayers written by their priests, which they keep in a small leathern purse by way of relics. The girls, and some of the women, tinge their nails red with the juice of an herb called by them *kena*: they dry and pulverize it; then mixing it with powder-alum, expose it in the air for 24 hours before they use it, and the colour lasts a long time. Both sexes wear close breeches, and boots of Russia leather, very light, and without heels, or leather soles; putting on galloches, or high-headed slippers like the Turks, when they go abroad. They wear also the same sort of bonnets and covering for the head; only the women set off theirs with trinkets, small pieces of money, and Chinese pearls. Wives are distinguished from maids by a long piece of linen worn under their bonnets; which folding round the neck, they tie in a knot behind, so that one end of it hangs down to the waist.

The Bukhar houses are of stone, and pretty good; but their moveables consist mostly of some China trunks plated with iron. Upon these, in the day-time, they spread the quilts they have made use of at night, and cover them with a cotton carpet of various colours. They have likewise a curtain sprigged with flowers and various figures; also a sort of bedstead half a yard high, and four yards long, which is hidden in the day-time with a carpet. They are very neat about their vic-tuals; which are dressed in the master's chamber by his slaves, whom the Bukhars either take or buy from the Russians, Kalmucs, or other neighbours. For this purpose there are in the chamber, according to the largeness of the family, several iron pots, set in a kind of range near a chimney. Some have little ovens, made, like the rest of the walls, with a stiff clay or bricks. Their utensils consist of some plates and porringers made of Cagua wood or of China, and some copper vessels. A piece of coloured calico serves them instead of a table-cloth and napkins. They use neither chairs nor tables, knives nor forks; but sit cross-legged on the ground; and the meat being served up, they pull it to pieces with their fingers. Their spoons resemble our wooden ladles. Their usual food is minced meats, of which they make pies of the form of a half moon: these serve for provisions when the Bukhars go long journeys, especially in winter. They carry them in a bag, having first exposed them to the frost; and when boiled in water, they make very good broth. Tea is their common drink, of which they have a black sort prepared with milk, salt, and butter; eating bread with it, when they have any.

As the Bukhars buy their wives, paying for them more or less according to their handsomeness; so the surest way to be rich is to have many daughters. The persons to be married must not see or speak to each other from the time of their contract to the day of marriage. This is celebrated with three days feasting,

Bukharia. as they do great annual festivals. The evening before the wedding, a company of young girls meet at the bride's house, and divert themselves till midnight, playing, dancing, and singing. Next morning the guests assemble, and help her to prepare for the ceremony. Then, notice being given to the bridegroom, he arrives soon after, accompanied by ten or twelve of his relations and friends. These are followed by some playing on flutes, and by an *Abus* (a kind of priest), who sings, while he beats two little timbrels. The bridegroom then makes a horse-race; which being ended, he distributes the prizes, six, eight, or twelve, in number, according to his ability. They consist of damasks, sables, fox-skins, calico, or the like. The parties do not see each other while the marriage ceremony is performing, but answer at a distance to the questions asked by the priest. As soon as it is over, the bridegroom returns home with his company; and after dinner carries them to the bride's house, and obtains leave to speak to her. This done, he goes back, and returns again in the evening, when he finds her in bed; and in presence of all the women, lays himself down by her in his clothes, but only for a moment. The same farce is acted for three days successively; but the third night he passes with her entirely, and the next day carries her home.

Although the prevailing religion throughout all Little Bukharia is the Mahometan, yet all others enjoy a perfect toleration. The Bukhars say, that God first communicated the koran to mankind by Moses and the prophets; that afterwards Mahomet explained, and drew a moral from it, which they are obliged to receive and practise. They hold Christ to be a prophet, but have no notion of his sufferings. Yet they believe in the resurrection, but cannot be persuaded that any mortal shall be eternally damned: on the contrary, they believe, that as the dæmons led them into sin, so the punishment will fall on them. They believe moreover, that at the last day every thing but God will be annihilated; and, consequently, that all creatures, the devils, angels, and Christ himself, will die. Likewise, that, after the resurrection, all men, excepting a few of the elect, will be purified or chastised by fire, every one according to his sins, which will be weighed in the balance. They say there will be eight different paradises for the good; and seven hells, where sinners are to be purified by fire: that those who will suffer most, are liars, cheats, and others of that kind: that the elect who do not feel the fire will be chosen from the good; viz. one out of 100 men, and one out of 1000 women; which little troop will be carried into one of the paradises, where they shall enjoy all manner of felicity, till it shall please God to create a new world. It is a sin, according to them, to say, that God is in heaven. God, say they, is every where; and therefore it derogates from his omnipresence to say that he is confined to any particular place. They keep an annual fast of 30 days, from the middle of July to the middle of August, during which time they taste nothing all day; but eat twice in the night, at sun-set and midnight; nor do they drink any thing but tea, all strong liquors being forbidden. Whoever transgresses these ordinances is obliged to emancipate his most valuable slave, or to give an entertainment to 60 people: he is likewise to receive 85 strokes on the back with a leathern strap

called *dura*. The common people, however, do not observe this fast exactly, and workmen are allowed to eat in the day-time. The Bukhars say prayers five times a-day; before morning, towards noon, afternoon, at sun-set, and in the third hour of the night.

Jenghis Khan, who conquered both the Bukharias from the Arabs, left the empire of them to his son Jagatay Khan. He died in the year 1240, and left the government to his son Kara Kulaku, and of Little Bukharia to another called *Amul Khoja Khan*. A long succession of khans is enumerated in each of these families, but their history contains no interesting particulars. They are long since extinct, and the Kalmuc Tartars are masters of the country.

BUL, in the ancient Hebrew chronology, the eighth month of the ecclesiastical, and the second of the civil year; it has since been called *Marshewan*, and answers to our October.

BULAC, a town of Egypt, situated on the eastern shore of the river Nile, about two miles west of Grand Cairo, of which it is the port town, and contains about 4000 families. It is a place of great trade, as all the vessels going up and down the Nile make some stay here. It is also at this place that they cut the banks of the river every year, in order to fill their canals and overflow the neighbouring grounds, without which the soil would produce neither grain nor herbage. E. Long. 32. N. Lat. 30.

BULAFU, a musical instrument, consisting of several pipes of wood tied together with thongs of leather, so as to form a small interspace between each pipe. It is used by the negroes of Guinea.

BULARCHUS, a Greek painter; the first who introduced (among the Greeks at least) different colours in the same picture. He flourished 740 B. C.

BULB, in the anatomy of plants, a kind of large bud, generally produced under the ground, upon or near the root of certain herbaceous plants, hence denominated *bulbous*.

A bulb is defined by Linnaeus to be a species of hybernaculum, produced upon the descending caudex or root; consisting of stipulæ, petioli, the rudiments of the former leaves, and scales or bark.

To elucidate this definition, it is proper to remark, that every bud contains, in miniature or embryo, a plant, in every respect similar to the parent plant upon which it is seated. Plants therefore are perpetuated in the buds, as well as in the seeds; and the species may be renewed with equal efficacy in either way.

The tender rudiments of the future vegetable of which the bud is composed, are inclosed, and during the severities of winter defended from cold and other external injuries, by a hard bark or rind which generally consists of a number of scales placed over each other like tiles, and fastened together by means of a tenacious, resinous, and frequently odoriferous substance. Thus defended, the buds remain upon different parts of the mother plant till the ensuing spring; and are, therefore, with great propriety, denominated by Linnaeus the *hybernaculum* or winter-quarters of the future vegetable.

With respect to their place, buds are situated either upon the stem and branches, or upon the roots: the former are styled *gemmae*, or buds properly so called; but as they subsist several years by their roots, may be furnished

Bul
Bulb.

Bulb. furnished with the other species of *hybernaculum* called *bulbs*, which, according to the definition, are seated upon the descending *caudex* or root.

Again, trees which are perennial, with a woody and durable stem or trunk, have generally proper buds or *gemmæ*, but no bulbs.

In bulbous plants, as the tulip, onion, or lily, what we generally call the *root*, is in fact a bulb or *hybernaculum*, which incloses and secures the embryo or future shoot.

At the lower part of this bulb may be observed a fleshy knob or tubercle, from whence proceed a number of fibres or threads. This knob, with the fibres attached to and hanging from it, is, properly speaking, the true root; the upper part being only the cradle or nursery of the future stem, which after the bulb has repaired a certain number of times, it perishes; but not till it has produced at its sides a number of smaller bulbs or suckers for perpetuating the species.

One part of Linnæus's definition still remains obscure. The bulb, says he, is composed of the remains or rudiments of the former leaves of the plant; *rudimento foliorum præteritorum*.

It is easy to comprehend that buds contain the rudiments of the future leaves; but how can bulbs be said to contain the rudiments of leaves that, to all appearance, are already perished? To explain this, let it be observed, that, in the opinion of very eminent botanists, the root, in a very great number of perennial herbs, is annually renewed or repaired out of the trunk or stalk itself; in which sense only, roots are properly said to descend.

In the perennials alluded to, the basis of the stalk continually, and by insensible degrees, descends below the surface of the earth, and is thus changed into a true root; which root, by the continuance of the said motion of the stalk, also descends; and thus, according to the durability of its substance, becomes a longer or shorter root; the elder or lower part rotting off in proportion as the upper is generated out of the stalk. Thus, in brownwort, the basis of the stalk, sinking down by degrees till it is hid under the ground, becomes the upper part of the root; and continuing still to sink, the next year becomes the lower part, and the following year rots away.

This is exactly what obtains in bulbous roots, as well as in the far greater number of other herbaceous perennials; as arum, valerian, tansy, samphire, primrose, woodforrel, iris, and others.

The immediate visible cause of this descent is the string-roots which this kind of trunks frequently puts forth; which descending themselves directly into the ground, serve like so many ropes for pulling the trunk after them. Hence the tuberous roots of iris are sometimes observed to reascend a little upon the rotting or fading away of the string-roots which hang at them.

In bulbous roots, where the stalk and former leaves of the plant are sunk below, and formed into what is called the *bulb* or wintering of the future vegetable, the radicles or small fibres that hang from the bulb are to be considered as the root; that is, the part which furnishes nourishment to the plant: the several rinds and shells whereof chiefly the bulb consists, successively

perish, and shrink up into so many dry skins; betwixt which, and in their centre, are formed other leaves and shells, and thus the bulb is perpetuated.

What has been said of the descent of roots by the sinking of the stalk, is further confirmed by the appearance of certain roots; as of valerian, plantago major, and devil's-bit, in which the lower part appears bitten or chopped off. In these the lower part rotting off as the upper descends, the living remainder becomes stumped, or seems bitten.

All bulbous roots, says the learned Dr Grew in his anatomy of plants, may be considered as hermaphrodite roots, or root and trunk both together: for the radicles or strings only are absolute roots; the bulb actually containing those parts which springing up make the body or leaves of the plant; so that it may be regarded as a large bud under ground.

Bulbous roots are said to be solid, when composed of one uniform lump of matter: tunicated, when formed of multitudes of coats surrounding one another; squamose, when composed of, or covered with, lesser flakes; duplicate, when there are only two to each plant; and aggregate, when there is such a congeries of such roots to each plant.

BULBOCASTANUM, in botany. See **BUNION**.

BULBOCODIUM, MOUNTAIN SAFFRON: A genus of the monogynia order, belonging to the hexandria class of plants; and in the natural method ranking under the 9th order, *Spathaceæ*. The corolla is funnel-shaped, and hexapetalous, with the heels narrow, supporting the stamina. There are two species, the alpinum and vernal. The first sort grows naturally on the Alps, and also on Snowdon in Wales. It hath a small bulbous root, which sends forth a few long narrow leaves somewhat like those of saffron, but narrower. In the middle of these the flower comes out, which stands on the top of the footstalk, growing erect, and is shaped like those of the crocus, but smaller; the footstalk rises about three inches high, and hath four or five short narrow leaves placed alternately upon it below the flower. This flowers in March, and the seeds are ripe in May. The second is a native of Spain. It hath a bulbous root shaped like those of the snow-drop, which sends out three or four spear-shaped concave leaves, between which comes out the flower, standing on a very short footstalk. The flowers appear about the same time with the last; at first they are of a pale colour, but afterwards change to a whitish purple. These plants may be propagated by off-sets at the decay of the flower and leaf every second or third year; also, by sowing the seed in pots in autumn, sheltering them in a frame from frost; and the plants will appear in the spring, which, at the decay of the leaves, may be taken up for planting in the borders in October, where they will flower the year following.

BULBOSE, or **BULBOUS**. See **BULB**.

BULEUTÆ, in Grecian antiquity, were magistrates answering to the decuriones among the Romans. See **DECURIO**.

BULFINCH, in ornithology. See **LOXIA**.

BULGARIA, a small province of Turkey in Europe, bounded on the north by Wallachia, on the east by the Black Sea, on the south by Romania and Macedonia.

Bulbocastanum
Bulgaria.

Bulgaria. cedonia, and on the west by Servia. It is very narrow, but 325 miles long on the side of the Danube, from Servia till it falls into the Black sea.

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Bulk.

The Bulgarians anciently inhabited the plains of Sarmatia that extended along the banks of the Volga. Thence they migrated, about the middle of the 7th century of the Christian æra, in quest of new settlements. A large body of them passed the Danube, and took possession of the country adjacent to the western coast of the Euxine sea. Several attempts were made by the Romans to dispossess and extirpate them: But they defended themselves with equal resolution and success. Constantine III. being defeated and intimidated, concluded an ignominious peace with them (A. D. 678.) and purchased their friendship by the payment of an annual tribute. Justinian II. refused to comply with these dishonourable terms, and invaded their territories (A. D. 687); but he was defeated, and constrained to renew the treaty. War was carried on, almost without interruption, between them and the eastern emperors, during the course of several centuries. After a long and doubtful struggle, the Romans prevailed; and the emperor Basil reduced Bulgaria to the form of a province (A. D. 1019). From this time the Bulgarians remained in subjection, and were governed by Roman dukes, until the reign of Isaac Angelus, when they revolted (A. D. 1186.)

The history of Bulgaria, in the subsequent period, scarcely merits attention. Stephen IV. king of Hungary, having defeated the Bulgarians, obliged them to acknowledge him as their sovereign. His successors were styled kings of Hungary and Bulgaria; and this title was transmitted, together with the kingdom of Hungary, to the house of Austria.

By the aid of the eastern emperors they threw off the Hungarian yoke; and, in return, they assisted their ally in an attempt to recover Adrianople (A. D. 1369). Provoked by this combination, Amurath invaded their country; and Bajazet, his successor, completed the conquest of it (A. D. 1396).

Bulgaria still remains a province of the Ottoman empire. The inhabitants are Christians; but extremely ignorant, insomuch that they seem to know nothing of Christianity but baptism and fasting. It is divided into four sangiacates; Byden, Sardice, Nicopolis, and Silistria. The chief towns are of the same names, except Sardice, which is now called *Sophia*.

BULGARIAN Language, the same with the **SCLAVONIC**.

BULIMY, a disease in which the patient is affected with an insatiable and perpetual desire of eating; and, unless he is indulged, he often falls into fainting fits. It is also called *fames canina*, canine appetite. See **MEDICINE-Index**.

BULITHUS, a stone found either in the gall-bladder, or in the kidneys and bladder, of an ox. See **Bos**.

BULK of a SHIP, the whole content in the hold for the stowage of goods.

Bulk-Heads are partitions made athwart the ship with boards, by which one part is divided from the other; as the great cabin, gun-room, bread-room, and several other divisions. The *bulk-head afore* is the partition between the fore-castle and gratings in the head.

VOL. III. Part II.

BULL (Dr John), a celebrated musician and composer, was born in Somersetshire about the year 1563, and, as it is said, was of the Somerset family. He was educated under Blitheman. In 1586, he was admitted at Oxford to the degree of bachelor of music, having practised in that faculty 14 years; and in 1592, was created doctor in the university of Cambridge. In 1591, he was appointed organist of the queen's chapel, in the room of his master, Blitheman.

Bull was the first Gresham professor of music, and was appointed to that station upon the special recommendation of queen Elizabeth. However skilful he might be in his profession, it seems he was not able to read his lectures in Latin; and therefore, by a special provision in the ordinances respecting the Gresham professors, made anno 1597, it is declared, that because Dr Bull is recommended to the place of music-professor by the queen's most excellent majesty, being not able to speak Latin, his lectures are permitted to be altogether English, so long as he shall continue music-professor there.

In the year 1601, he went abroad for the recovery of his health, which at that time was declining; and during his absence was permitted to substitute, as his deputy, a son of William Bird, named *Thomas*. He travelled incognito into France and Germany; and Wood takes occasion to relate a story of him while abroad, which the reader shall have in his own words.

"Dr Bull hearing of a famous musician belonging to a cathedral in St Omer's, he applied himself, as a novice, to him, to learn something of his faculty, and to see and admire his works. This musician, after some discourse had passed between them, conducted Bull to a vestry or music-school joining to the cathedral, and showed him a lesson or song of 40 parts; and then made a vaunting challenge to any person in the world to add one part more to them, supposing it to be so complete and full, that it was impossible for any mortal man to correct or add to it. Bull thereupon, desiring the use of pen, ink, and ruled paper, such as we call *musical paper*, prayed the musician to lock him up in the said school for two or three hours; which being done, not without great disdain by the musician, Bull, in that time or less, added 40 more parts to the said lesson or song. The musician thereupon being called in, he viewed it, tried it, and retried it; at length he burst out into a great ecstasy, and swore by the great God, that he that added these 40 parts must be either the devil or Dr Bull. Whereupon Bull making himself known, the musician fell down and adored him. Afterwards, continuing there and in those parts for a time, he became so much admired, that he was courted to accept of any place of preferment suitable to his profession, either within the dominions of the emperor, the king of France, or Spain; but the tidings of these transactions coming to the English court, queen Elizabeth commanded him home." *Fasti*, anno 1586.

Dr Ward, who has given the life of Dr Bull, in his lives of the Gresham professors, relates, that upon the decease of queen Elizabeth he became chief organist to king James, and had the honour of entertaining his majesty and prince Henry at Merchant Taylor's hall with his performance on the organ. The same author proceeds to relate, that in 1613 Bull quitted Eng-

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land and went to reside in the Netherlands, where he was admitted into the service of the archduke. He suggests, as the reason of Bull's retirement, that the science began to sink in the reign of king James; which he infers from that want of court-patronage, which, it seems, induced the musicians of that day to dedicate their works to one another. But surely Bull had none of these reasons to complain of being slighted that others had. He was in the service of the chapel, and at the head of the prince's musicians; and in the year 1604 his salary for the chapel duty had been augmented. The circumstances of his departure from England may be collected from the following entry now to be seen in the cheque book: "1613, John Bull doctor of music went beyond seas without licence, and was admitted into the archduke's service, and entered into paie there about Mich. and Peter Hopkins a base from Paul's was sworn into his place the 27th of December following. His wages from Mich. unto the day of the swearing of the said Peter Hopkins was disposed of by the deane of his majesty's chapel." Wood says, that Dr Bull died at Hamburgh: others have said at Luback.

The only works of Bull in print are lessons in the "Parthenia, or the maiden-head of the first music that ever was printed for the virginals." An anthem of his, "Deliver me, O God," is to be found in Bernard's collection of church-music. Dr Ward has given a long list of compositions of Dr Bull in manuscript in the collection of the late Dr Pepusch, by which it appears that he was equally excellent in vocal and instrumental harmony. By some of the lessons in the Parthenia it seems that he was possessed of a power of execution on the harpsichord far beyond what is generally conceived of the masters of that time. As to his lessons, they were, in the estimation of Dr Pepusch, not only for the harmony and contrivance, but for air and modulation, so excellent, that he scrupled not to prefer them to those of Couperin, Scarlatti, and others of the modern composers for the harpsichord.

BULL (George), bishop of St David's, was born at Wells, in 1634; and educated at Exeter college, in Oxford. The first benefice he enjoyed was that of St George's, near Bristol, whence he rose successively to be rector of Suddington in Gloucestershire, prebendary of Gloucester, archdeacon of Llandaff, and in 1705 bishop of St David's. This dignity he enjoyed about four years, and died in 1709. During the usurpation of Cromwell, he adhered steadily, though still with great prudence, to the forms of the church of England; and in the reign of James II. preached very strenuously against the errors of Popery. He wrote, 1. A defence of the Nicene faith. 2. Apostolical harmony. 3. Primitive apostolical tradition; and other works.

BULL, in zoology. See Bos.

Wild Bulls. The wild bulls, now so numerous on the continent of America, are said to have sprung from one bull and seven cows, which were carried thither by some of the first conquerors. For the manner of hunting these, see BUCANEERS.

BULL, in astronomy. See ASTRONOMY, n° 406.

BULL'S-EYE, among seamen, a small, obscure, subline cloud, ruddy in the middle, that sometimes appears to mariners, and is the immediate forerunner of a great storm at sea.

BULL-Fighting, a sport or exercise much in vogue a-

mong the Spaniards and Portuguese, consisting in a kind of combat of a cavalier or torreadore against a wild bull, either on foot or on horseback, by riding at him with a lance. The Spaniards have bull-fights, i. e. feasts attended with shows, in honour of St John, the Virgin Mary, &c. This sport the Spaniards received from the Moors, among whom it was celebrated with great eclat. Some think that the Moors might have received the custom from the Romans, and they from the Greeks. Dr Plot is of opinion, that the *ταυροκαταφιων ημεραι* among the Thessalians, who first instituted this game, and of whom Julius Cæsar learned and brought it to Rome, were the origin both of the Spanish and Portuguese bull-fighting, and of the English bull-running. This practice was prohibited by Pope Pius V. under pain of excommunication incurred *ipso facto*. But succeeding popes have granted several mitigations in behalf of the torreadors.

From the following account of a bull-feast in the Coliseum at Rome 1332, extracted from Muratori by Mr Gibbon, the reader may form some idea of the pomp, the ceremonies, and the danger which attended these exhibitions. "A general proclamation as far as Rimini and Ravenna invited the nobles to exercise their skill and courage in this perilous adventure. The Roman ladies were marshalled in three squadrons, and seated in three balconies, which on this day, the third of September, were lined with scarlet cloth. The fair Jacova di Rovere led the matrons from beyond the Tiber, a pure and native race, who still represent the features and character of antiquity. The remainder of the city was divided between the Colonna and Ursini families: the two factions were proud of the number and beauty of their female bands: the charms of Savella Ursini are mentioned with praise; and the Colonna regretted the absence of the youngest of their house, who had sprained her ankle in the garden of Nero's tower. The lots of the champions were drawn by an old and respectable citizen; and they descended into the arena, or pit, to encounter the wild-bulls, on foot as it should seem, with a single spear. Amidst the crowd, our annalist has selected the names, colours, and devices of 20 of the most conspicuous knights. Several of the names are the most illustrious of Rome and the ecclesiastical state; Malatesta, Polenta, della Valle, Cafarello, Savelli, Cappoccio, Conti, Annibaldi, Altieri, Corfi. The colours were adapted to their taste and situation. And the devices are expressive of hope or despair, and breathe the spirit of gallantry and arms. "I am alone, like the youngest of the Horatii," the confidence of an intrepid stranger: "I live disconsolate," a weeping widower: "I burn under the ashes," a discreet lover: "I adore Lavinia or Lucretia," the ambiguous declaration of a modern passion: "My faith is as pure," the motto of a white livery: "Who is stronger than myself?" of a lion's hide: "If I am drowned in blood, what a pleasant death!" the wish of ferocious courage. The pride or prudence of the Ursini restrained them from the field, which was occupied by three of their hereditary rivals, whose inscriptions denoted the lofty greatness of the Colonna name: "Though sad, I am strong:" "Strong as I am great:" "If I fall (addressing himself to the spectators) you fall with me:"—intimating (says the writer), that while the other families were the subjects of

Bull.

the

Bull.

the Vatican, they alone were the supporters of the Capitol. The combats of the amphitheatre were dangerous and bloody. Every champion successively encountered a wild bull; and the victory may be ascribed to the quadrupeds, since no more than eleven were left on the field, with the loss of nine wounded and 18 killed on the side of their adversaries. Some of the noblest families might mourn; but the pomp of the funerals, in the churches of St John Lateran and St Maria Maggiore, afforded a second holiday to the people."—Doubtless it was not in such conflicts that the blood of the Romans should have been shed; yet, in blaming their rashness, we are compelled to applaud their gallantry; and the noble volunteers, who display their magnificence and risk their lives under the balconies of the fair, excite a more generous sympathy than the thousands of captives and malefactors who were reluctantly dragged to the scene of slaughter."

A striking relic of barbarity in the Spanish manners of the present day, is the excessive attachment of that nation to bull-fights, a spectacle which shocks the delicacy of every other people in Europe. Many Spaniards consider this practice as the sure means of preserving that energy by which they are characterised, and of habituating them to violent emotions, which are terrible only to timid minds. But it seems difficult to comprehend what relation there is between bravery and a spectacle where the assistants now run no danger; where the actors prove by the few accidents which befall them, that theirs has nothing in it very interesting; and where the unhappy victims meet only with certain death as the reward of their vigour and courage. Another proof that these spectacles have little or no influence on the disposition of the mind is, that children, old men, and people of all ages, stations, and characters, assist at them; and yet their being accustomed to such bloody entertainments appears neither to correct their weakness and timidity, nor alter the mildness of their manners.

The bull-fights are very expensive; but they bring great gain to the undertakers. The worst places cost two or four rials, according as they are in the sun or in the shade. The price of the highest is a dollar. When the price of the horses and bulls, and the wages of the *Torreadores*, have been paid out of this money, the rest is generally appropriated to pious foundations: at Madrid it forms one of the principal funds of the hospital. It is only during summer that these combats are exhibited, because the season then permits the spectators to sit in the open air, and because the bulls are then more vigorous. Those which are of the best breed are condemned to this kind of sacrifice; and connoisseurs are so well acquainted with their distinguishing marks, that as soon as a bull appears upon the arena, they can mention the place where he was reared. This arena is a kind of circus surrounded by about a dozen of seats, rising one above another; the highest of which only is covered. The boxes occupy the lower part of the edifice. In some cities, Valladolid for example, which have no place particularly set apart for these combats, the principal square is converted into a theatre. The balconies of the houses are widened, so as to project over the streets which end there; and it is really a very interesting sight to see the different classes of people assembled around this square, wait-

ing for the signal when the entertainment is to commence, and exhibiting every external sign of impatience and joy. The spectacle commences by a kind of procession around the square, in which appear, both on horseback and on foot, the combatants who are to attack the fierce animal; after which two alguazils, dressed in perukes and black robes, advance with great gravity on horseback; who go and ask from the president of the entertainment an order for it to commence. A signal is immediately given; and the animal, which was before shut up in a kind of hovel with a door opening into the square, soon makes his appearance. The officers of justice, who have nothing to do with the bull, prudently hasten to retire, and their fright is a prelude to the cruel pleasure which the spectators are about to enjoy. The bull, however, is received with loud shouts, and almost stunned by the noisy expressions of their joy. He has to contend first against the picadores, combatants on horseback, who, dressed according to the ancient Spanish manner, and as it were fixed to their saddles, wait for him, each being armed with a long lance. This exercise, which requires strength, courage, and dexterity, is not considered as disgraceful. Formerly the greatest lords did not disdain to practise it; even at present some of the *hidalgos* solicit for the honour of fighting the bull on horseback, and they are then previously presented to the people, under the auspices of a patron, who is commonly one of the principal personages at court.

The picadores, whoever they may be, open the scene. It often happens that the bull, without being provoked, darts upon them, and every body entertains a favourable opinion of his courage. If, notwithstanding the sharp pointed weapon which defends his attack, he returns immediately to the charge, their shouts are redoubled, as their joy is converted into enthusiasm; but if the bull, struck with terror, appears pacific, and avoids his persecutors, by walking round the square in a timid manner, he is hooted at and hissed by the whole spectators, and all those near whom he passes load him with blows and reproaches. He seems then to be a common enemy, who has some great crime to expiate; or a victim, in the sacrifice of which all the people are interested. If nothing can awaken his courage, he is judged unworthy of being tormented by men; the cry of *perros, perros*, brings forth new enemies against him, and large dogs are let loose upon him, which seize him by the neck and ears in a furious manner. The animal then finds the use of those weapons with which nature has furnished him; he tosses the dogs into the air, who fall down stunned, and sometimes mangled; they however recover, renew the combat, and generally finish by overcoming their adversary, who thus perishes ignobly. If, on the other hand, he presents himself with a good grace, he runs a longer and nobler, but a much more painful career. The first act of the tragedy belongs to the combatants on horseback; this is the most animated and bloody of all the scenes, and often the most disgusting. The irritated animal braves the pointed steel which makes deep wounds in his neck, attacks with fury the innocent horse who carries his enemy, rips up his sides, and overturns him together with his rider. The latter, then dismounted and disarmed, would be exposed to imminent danger, did not combatants on foot, called

Bull.

Bull. *chulos*, come to divert the bull's attention, and to provoke him, by shaking before him different pieces of cloth of various colours. It is, however, at their own risk that they thus save the dismounted horseman; for the bull sometimes pursues them, and they have then need for all their agility. They often escape from him by letting fall in his way the piece of stuff which was their only arms, and against which the deceived animal expends all his fury. Sometimes he does not accept this substitute, and the combatant has no other resource but to throw himself speedily over a barrier, six feet high, which incloses the interior part of the arena. In some places this barrier is double, and the intermediate space forms a kind of circular gallery, behind which the pursued torreadore is in safety. But when the barrier is single, the bull attempts to jump over it, and often succeeds. The reader may easily imagine in what consternation the nearest of the spectators then are; their haste to get out of the way, and to crowd to the upper benches, becomes often more fatal to them than even the fury of the bull, who, stumbling at every step, on account of the narrowness of the place and the inequality of the ground, thinks rather of his own safety than of revenge, and besides soon falls under the blows which are given him from all quarters.

Except in such cases, which are very rare, he immediately returns. His adversary recovered, has had time to get up; he immediately remounts his horse, provided the latter is not killed or rendered unfit for service, and the attack commences; but he is often obliged to change his horse several times. Expressions cannot then be found to celebrate these acts of prowess, which for several days become the favourite topic of conversation. The horses, very affecting models of patience, courage, and docility, may be seen treading under their feet their own bloody entrails, which drop from their sides half torn open, and yet obeying, for some time after, the hand which conducts them to new tortures. Spectators of delicacy are then filled with disgust, which converts their pleasure into pain. A new act is however preparing, which reconciles them to the entertainment. As soon as it is concluded that the bull has been sufficiently tormented by the combatants on horseback, they retire and leave him to be irritated by those on foot. The latter, who are called *banderilleros*, go before the animal; and the moment he darts upon them they plunge into his neck, two by two, a kind of darts called *banderillas*, the points of which are hooked, and which are ornamented with small streamers made of coloured paper. The fury of the bull is now redoubled; he roars, tosses his head, and the vain efforts which he makes serve only to increase the pain of his wounds: this last scene calls forth all the agility of his adversaries. The spectators at first tremble for them, when they behold them braving so near the horns of this formidable animal; but their hands, well exercised, aim their blows so skilfully, and they avoid the danger so nimbly, that after having seen them a few times, one neither pities nor admires them, and their address and dexterity seem only to be a small episode of the tragedy, which concludes in the following manner: When the vigour of the bull appears to be almost exhausted; when his blood, issuing from twenty wounds, streams along his neck and moi-

stens his robust sides; and when the people, tired of one object, demand another victim; the president of the entertainment gives the signal of death, which is announced by the sound of trumpets. The matador then advances, and all the rest quit the arena; with one hand he holds a long dagger, and with the other a kind of flag, which he waves backwards and forwards before his adversary. They both stop and gaze at one another; and while the agility of the matador deceives the impetuosity of the bull, the pleasure of the spectators, which was for some time suspended, is again awakened into life. Sometimes the bull remains motionless, throws up the earth with his foot, and appears as if meditating revenge.

The bull in this condition, and the matador who calculates his motions and divines his projects, form a group which an able pencil might not disdain to delineate. The assembly in silence behold this dumb scene. The matador at length gives the mortal blow; and if the animal immediately falls, a thousand voices proclaim with loud shouts the triumph of the conqueror; but if the blow is not decisive, if the bull survives and seeks still to brave the fatal steel, murmurs succeed to applause, and the matador, whose glory was about to be raised to the skies, is considered only as an unskilful butcher. He endeavours to be soon revenged, and to disarm his judges of their severity. His zeal sometimes degenerates into blind fury, and his partizans tremble for the consequences of his imprudence. He at length directs his blow better. The animal vomits up blood; he staggers and falls, while his conqueror is intoxicated with the applauses of the people. Three mules, ornamented with bells and streamers, come to terminate the tragedy. A rope is tied around the bull's horns, which have betrayed his valour, and the animal, which but a little before was furious and proud, is dragged ignominiously from the arena which he has honoured, and leaves only the traces of his blood and the remembrance of his exploits, which are soon effaced on the appearance of his successor. On each of the days set apart for these entertainments, six are thus sacrificed in the morning, and twelve in the afternoon, at least in Madrid. The three last are given exclusively to the matador, who, without the assistance of the picadores, exerts his ingenuity to vary the pleasure of the spectators. Sometimes he causes them to be combated by some intrepid stranger, who attacks them mounted on the back of another bull, and sometimes he matches them with a bear: this last method is generally destined for the pleasure of the populace. The points of the bull's horns are concealed by something wrapped round them, which breaks their force. The animal, which in this state is called *Embolado*, has power neither to pierce nor to tear his antagonist. The amateurs then descend in great numbers to torment him, each after his own manner, and often expiate this cruel pleasure by violent contusions; but the bull always falls at length under the stroke of the matador. The few spectators who are not infected by the general madness for this sport, regret that those wretched animals do not, at least, purchase their lives at the expence of so many torments and so many efforts of courage; they would willingly assist them to escape from their persecutors. In the minds of such spectators disgust succeeds compassion, and satiety suc-

Bull.

Bull. ceeds disgust. Such a series of uniform scenes makes that interest become languid, which this spectacle, on its commencement, seemed to promise. But to connoisseurs, who have thoroughly studied all the stratagems of the bull, the resources of his address and fury, and the different methods of irritating, tormenting, and deceiving him, none of these scenes resembles another, and they pity those frivolous observers who cannot remark all their varieties.

The Spanish government are very sensible of the moral and political inconveniences arising from this species of phrensy. They have long since perceived, that among a people whom they wish to encourage to labour, it is the cause of much disorder and dissipation; and that it hurts agriculture, by destroying a great number of robust animals, which might be usefully employed: but they are obliged to manage with caution a taste which it might be dangerous to attempt to abolish precipitately. They are, however, far from encouraging it. The court itself formerly reckoned bull-fights among the number of its festivals, which were given at certain periods. The *Plaza-Mayor* was the theatre of them, and the king and the royal family honoured them with their presence. His guards presided there in good order. His halberdiers formed the interior circle of the scene: and their long weapons, held out in a defensive posture, were the only barrier which they opposed against the dangerous caprices of the bull. These entertainments, which, by way of excellence, were called *Fiestas Reales*, are become very rare. Charles III. who endeavoured to polish the nation, and to direct their attention to useful objects, was very desirous of destroying a taste in which he saw nothing but inconveniences; but he was too wise to employ violent means for that purpose. He, however, confined the number of bull-fights to those, the profits of which were applied to the support of some charitable institution, with an intention of substituting for these other funds afterwards. Bull-fights, by these means being rendered less frequent, will, perhaps, gradually lose their attractions, until more favourable circumstances permit the entire abolition of them.

BULL-Running, denotes a feudal custom obtaining in the honour of Tutbury in Staffordshire; where, anciently, on the day of the assumption of our Lady, a bull is turned loose by the lord to the minstrels; who, if they can catch him before he passes the river Dove, are to have him for their own, or, in lieu thereof, to receive each 40 pence; in consideration of which custom they pay 20 pence yearly to the said lord.

BULL and Boar. By the custom of some places, the parson is obliged to keep a bull and boar for the use of his parishioners, in consideration of his having tithes of calves and pigs, &c.

BULL-Frog, in zoology. See RANA.

BULL-Head, or *Miller's Thumb*, in ichthyology. See COTTUS.

BULL, among ecclesiastics, a written letter, dispatched, by order of the Pope, from the Roman chancery, and sealed with lead, being written on parchment, by which it is partly distinguished from a brief: see the article BRIEF.—It is a kind of apostolical rescript, or edict; and is chiefly in use in matters of justice or grace. If the former be the intention of the

bull, the lead is hung by a hempen cord; if the latter, by a silken thread. It is this pendent lead, or seal, which is, properly speaking, the bull, and which is impressed on one side with the heads of St Peter and St Paul, and on the other with the name of the Pope and the year of his pontificate. The bull is written in an old, round, Gothic letter, and is divided into five parts, the narrative of the fact, the conception, the clause, the date, and the salutation, in which the Pope styles himself *servus servorum*, i. e. the servant of servants. These instruments, besides the lead hanging to them, have a cross, with some text of scripture, or religious motto, about it. Bulls are granted for the consecration of bishops, the promotion to benefices, and the celebration of jubilees, &c.

BULL in cana Domini, a particular bull read every year, on the day of the Lord's supper, or Maundy Thursday, in the Pope's presence, containing excommunications and anathemas against heretics, and all who disturb or oppose the jurisdiction of the holy see. After the reading of the bull, the Pope throws a burning torch in the public place, to denote the thunder of this anathema.

Golden BULL, an edict, or imperial constitution, made by the emperor Charles IV. reputed to be the magna charta, or the fundamental law of the German empire.

It is called *golden*, because it has a golden seal, in the form of a pope's bull, tied with yellow and red cords of silk: upon one side is the emperor represented sitting on his throne, and on the other the capital of Rome. It is also called *Caroline*, on Charles IV.'s account. Till the publication of the golden bull, the form and ceremony of the election of an emperor were dubious and undetermined, and the number of the electors not fixed. This solemn edict regulated the functions, rights, privileges, and pre-eminences, of the electors. The original, which is in Latin, on vellum, is preserved at Francfort: this ordonnance, containing 30 articles or chapters, was approved of by all the princes of the empire, and remain still in force.

Silver BULLS were not in so frequent use; tho' we do not want instances of them.

Leaden BULLS were sent by the emperors of Constantinople to despots, patriarchs, and princes; and the like were also used by the grandees of the Imperial court, as well as by the kings of France, Sicily, &c. and by bishops, patriarchs, and popes. It is to be observed, that the leaden bulls of these last had, on one side, the name of the pope or bishop inscribed. Polydore Virgil makes pope Stephen III. the first who used leaden bulls, about the year 772. But others find instances of them as early as Silvester, Leo I. and Gregory the Great. The latter popes, beside their own names, strike the figures of St Peter and St Paul on their bulls, a practice first introduced by Pope Paschal II. But why, in these bulls, the figure of St Paul is on the right, and that of St Peter on the left side, is a question which has occasioned many conjectures and disputes.

Waxen BULLS are said to have been first brought into England by the Normans. They were in frequent use among the Greek emperors, who thus sealed letters to their wives, mothers, and sons. Of these there were two sorts, one red, and the other green.

BULLA,

Bulla,
Bullæ.

BULLA, or **DIPPER** in zoology: A genus belonging to the order of vermes testaceæ. It is an animal of the snail-kind: the shell consists of one valve, convoluted, and without any prickles; the aperture is narrowish, oblong, longitudinal, and entire at the base; the colomella is smooth and oblique. There are 23 species; four of them found in the British seas; the rest chiefly natives of the Asiatic and Atlantic oceans.

* History of
Manchester,
Vol. I. p. 79.

BULLÆ, in antiquity, a kind of ornaments much in use among the ancient Romans. Mr Whittaker* is of opinion that they were originally formed of leather among all ranks of people; and it is certain that they continued so to the last among the commonalty. He also imagines, that at first the bulla was intended as an amulet rather than an ornament; as a proof of which he tells us that the bullæ were frequently impressed with the figure of the sexual parts. It is universally asserted by the critics, that the bullæ were made hollow for the reception of an amulet; but this Mr Whittaker contradicts from the figure of a golden one lately found at Manchester, which had no aperture whereby an amulet could have been introduced.—Pliny refers the original of the bulla to the elder Tarquin, who gave one with the prætexta to his son, because at the age of 14 he had with his own hand killed an enemy; and in imitation of him it was afterwards assumed by other patricians. Others affirm that the bulla was given by that king to the sons of all the patricians who had borne civil offices. Lastly, others allege, that Romulus first introduced the bulla, and gave it to Tullus Hostilius, the first child born of the rape of the Sabines.—As to the form of the bullæ, Mr Whittaker informs us that they were originally made in the shape of hearts; but they did not always retain the form of an heart, any more than they were always made of leather. As the wealth of the state and the riches of individuals increased, the young patrician distinguished himself by a bulla of gold, while the common people wore the amulet of their ancestors. The figure of the heart then became so generally round, some even having the impression of an heart upon them, that there are not many of the original form to be found in the cabinets of the curious. The form is naturally varied from a complete circle to that of a segment; and this was the shape of the abovementioned bulla found at Manchester. When the youth arrived at 15 years of age, they hung up their bullæ about the necks of their gods lares. We are further informed, that the bullæ were not only hung about the necks of young men, but of horses also. We may add, that bullæ were sometimes allowed to statues; whence the phrase *statuæ bullatæ*.

BULLÆ was also the denomination given to divers other metalline ornaments made after the same form; and in this sense *bullæ* seem to include all gold and silver ornaments of a roundish form, whether worn on the habits of men, the trappings of horses, or the like. Such were those decorations used by the ancients on their doors and belts. The bullæ of doors were a kind of large-headed nails fastened on the doors of the rich, and kept bright with great care. The doors of temples were sometimes adorned with golden bullæ. Mr Bancelot takes the bullæ worn by soldiers on their belts to be something more than mere ornaments. They seem to have been considered as preservations from dangers

and diseases, and even means of acquiring glory, and other advantages. The like may perhaps be extended to the bullæ on doors, which were probably placed there as a security to them from being broken or violated.

BULLÆ also denoted a table hung up in the public courts, to distinguish which days were fasti, and which nefasti; answering in some measure to our kalendar.

BULLET, an iron or leaden ball or shot, wherewith fire arms are loaded. Bullets are cast in iron moulds, consisting of two concave hemispheres, with a handle whereby to hold them; and between them is a hole, called *the gate*, at which to pour in the melted metal. The chaps or hemispheres of bullet-moulds are first punched, being blood-red hot, with a round ended punch, of the shape and nearly of the size of the intended bullets. To cleanse the insides, they make use of a bullet bore, which consists of a steel shank, having a globe at one end, wherewith to bore the inside of a mould clean, and of the intended size.

BULLEYN (William), a learned physician and botanist, was born in the isle of Ely, in the former part of the reign of Henry VIII. and educated at Cambridge. Botany being his favourite study, he travelled through various parts of England, Scotland, and Germany, chiefly with an intention to improve his knowledge in that science. In the reign of Edward VI. or of queen Mary, Mr Bulleyn appears, from his remarks on the natural productions of that country, to have resided at Norwich, or in that neighbourhood, and also to have spent some time at Bloxhall in Suffolk: but he afterwards removed into the north, and settled at Durham, where he practised physic with considerable reputation and success. His great patron at this time was Sir Thomas Hilton, knight, baron of Hilton, who was governor of Tinmouth castle in the reign of Philip and Mary. In 1560, he came to London, and, soon after his arrival, was accused by William Hilton of Bidick, of having murdered his brother Sir Thomas, our author's friend and patron. He was arraigned before the duke of Norfolk, and honourably acquitted. This Hilton afterwards hired some villains to assassinate the doctor; but this attempt proving ineffectual, he had him arrested on an action for debt, and he remained for a long time in prison. During this confinement, Dr Bulleyn composed several of those works which raised his reputation as a medical writer. He died in January 1576, and was buried in St Giles's Cripplegate, in the same grave with his brother the divine, who died 13 years before, and in which John Fox the martyrologist was interred 11 years after. Dr Bulleyn appears from his writings to have been well acquainted with the works of the ancient Greek, Roman, and Arabian physicians. According to the modern practice, his books, were they generally known, would be of little use; but as he was a man of genius and fertile imagination, they are by no means barren of entertainment. He wrote, 1. The government of health, 1559, 8vo. 2. A regimen against the pleurisy, 8vo. London, 1562. 3. Bulleyn's bulwark of defence against all sickness, soreness, and wounds that dooedaily assault mankind, London printed by John Kingston, 1562, folio. This includes, The government of health. 4. A dialogue both pleasant and piousfull, wherein is a goodlie regimen against the fever pestilence.

Bullet,
Bulleyn.

Bullialdus
||
Bumicilli.

lence, with a consolation and comfort against death, London, 1564, 8vo. 1569, 8vo. Very scarce. There is a wooden print of the author prefixed to the first edition of his government of health; also a small one engraved by Stukeley in 1722.

BULLIALDUS (Ismael), an eminent astronomer, was born at Laon in the isle of France in 1605. He travelled in his youth for the sake of improvement; and afterwards published several works, among which are, 1. *De natura lucis*. 2. *Philolaus*. 3. *Astronomia philolaica, opus novum, in quo motus planetarum per novam et veram hypothesein demonstrantur*. 4. *Astronomia philolaica fundamenta clarius explicata et asserta adversus Zothi Wardi impugnationem*. He also wrote a piece or two upon Geometry and Arithmetic. In 1661, he paid Hevelius a visit at Dantzic, for the sake of seeing his optical and astronomical apparatus. Afterwards he became a presbyter at Paris, and died there in 1694.

BULLINGER (Henry), born at Bremgarten in Swisserland in 1504, was an eminent Zuinglian minister, a great supporter of the reformation, and employed in many ecclesiastical negotiations. He composed many books, one against Luther in particular. He died in 1575.

BULLION, uncoined gold or silver in the mass.

Those metals are called so, either when smelted from the native ore, and not perfectly refined; or when they are perfectly refined, but melted down in bars or ingots, or in any unwrought body, of any degree of fineness.

When gold and silver are in their purity, they are so soft and flexible, that they cannot well be brought into any fashion for use, without being first reduced and hardened with an alloy of some other baser metal.

To prevent these abuses which some might be tempted to commit in the making of such alloys, the legislators of civilized countries have ordained, that there shall be no more than a certain proportion of a baser metal to a particular quantity of pure gold or silver, in order to make them of the fineness of what is called the standard gold or silver of such a country.

According to the laws of England, all sorts of wrought plate in general ought to be made to the legal standard; and the price of our standard gold and silver is the common rule whereby to set a value on their bullion, whether the same be ingots, bars, dust, or foreign specie: whence it is easy to conceive that the value of bullion, cannot be exactly known, without being first essayed, that the exact quantity of pure metal therein contained may be determined, and consequently whether it be above or below the standard.

Silver and gold, whether coined or anointed (though used for a common measure of other things), are no less a commodity than wine, tobacco, or cloth; and may, in many cases, be exported as much to the national advantage as any other commodity.

BULLOCK, the same with an ox, or gelded bull. See **Bos**.

BULTER, a term used to denote the refuse of meal after dressing, or the cloth wherein it is dressed, otherwise called *bulter-cloth*.

BULWARK, in the ancient fortification. See **RAMPART**.

BUMICILLI, a religious sect of Mahometans in Egypt and Barbary, who pretend to fight with devils,

and commonly appear in a fright and covered with wounds and bruises. About the full moon they counterfeit a combat in the presence of all the people, which last for two or three hours, and is performed with assagaias, or javelins, till they fall down quite spent; in a little time, however, they recover their spirits, get up, and walk away.

BUNDLE, a collection of things wrapped up together. Of baste-ropes, harness-plates, and gloves knives, ten make a bundle; of Hamburg yarn, twenty skeans; of basket rods, three feet the band.

BUNEL (Peter), a native of Toulouse, was one of the most elegant writers of the Latin tongue in the 16th century, but was still more conspicuous for the regularity of his manners. He did not seek either for riches or lucrative employments; but, contented with the bare necessities of life, applied himself wholly to the improvement of his mind. He died at Turin in 1547, aged 47; and has left behind him some Latin epistles, which are written with the utmost purity. The magistrates of Toulouse have a bust of him in marble, placed in their town-house. The most correct edition of his Letters is that of Henry Stephens in 1581.

BUNGAY, a market-town of Suffolk, situated on the river Wavenny, about 32 miles north-east of Bury. E. Long. 1. 35. N. Lat. 52. 35.

BUNIAS, in botany: A genus of the 39th natural order, *Siliquose*, belonging to the tetradynamia class of plants, for which there is no English name. The silicula is deciduous, four-sided, muricated, or shagreened with unequal pointed angles. There are eight species; all of them annual plants, but none of them possessed of any remarkable property.

BUNIUM, *pig-nut*, or *earth-nut*, in botany: A genus of the digynia order, belonging to the pentandria class of plants; and in the natural method ranking under the 45th order, *Umbellatæ*. The corolla is uniform, the umbel thick, and the fruit ovate. There is but one species, the *bulbocastanum*, with a globular root. This grows naturally in moist pastures in many parts of Britain. It hath a tuberos solid root, which lies deep on the ground. The leaves are finely cut, and lie near the ground. The stalk rises a foot and a half high; is round, channelled, and solid; the lower part being naked; but above, where it branches out, there is one leaf placed below every branch. The flowers are white, and shaped like those of other umbelliferous plants; the seeds are small, oblong, and when ripe are channelled. The roots of this sort are frequently dug up, and by some people eaten raw. They have much resemblance in taste to a chestnut, whence the plant obtains the name of *bulbocastanum*.

BUNT of a SAIL, the middle part of it, formed designedly into a bag or cavity, that the sail may gather more wind. It is used mostly in top-sails, because courses are generally cut square, or with but small allowance for bunt or compass. The bunt holds much leeward wind; that is, it hangs much to leeward.

BUNT-Lines, are small lines made fast to the bottom of the sails, in the middle part of the bolt-rope, to a cringle, and are so reeved through a small block, seized to the yard. Their use is to trice up the bunt of the sail for the better furling it up.

BUNTING, in ornithology. See **EMBERIZA**.

Bundle
||
Bunting.

Bunting-
ford
||
Buoy.

BUNTINGFORD, a town of Hertfordshire, with a market on Mondays, and two fairs, on June 29th, and November 30th, for pedlars ware. It is a good thoroughfare town, but small, and is accounted only a large hamlet. W. Long. 0. 6. N. Lat. 51. 55.

BUNTZEL, or **BUNTZLAU**, a town of Silesia, in the duchy of Jauer. The greatest part of the houses are built with stone, and there were formerly rich mines in the neighbourhood. It is in the common road to Leipzig; and their trade is earthen ware, of which they make great quantities. E. Long. 15. 50. N. Lat. 51. 12.

BUNYAN (John), author of the *Pilgrim's Progress*, was born at Elstow, near Bedford, in 1628. He was the son of a tinker; and, in the early part of his life, was a great reprobate, and a soldier in the parliament army: but being at length deeply struck with a sense of his guilt, he laid aside his profligate courses, became remarkable for his sobriety, and applied himself to obtain some degree of learning. About the year 1655, he was admitted a member of a Baptist congregation at Bedford, and was soon after chosen their preacher: but, in 1660, being taken up, and tried for presuming to preach, he was cruelly sentenced to perpetual banishment; and in the mean time committed to jail, where necessity obliged him to learn to make long-tagged thread-laces for his support: to add to his distress, he had a wife and several children, among whom was a daughter who was blind. In this unjust and cruel confinement he was detained twelve years and a half, and during that time wrote many of his tracts; but he was at length discharged, by the humane interposition of Dr Barlow. When king James's declaration for liberty of conscience was published, he was chosen pastor of a congregation at Bedford. He at length died of the fever at London, on the 31st of August 1688, aged 60. He also wrote an allegory, called *The Holy War*. His *Pilgrim's Progress* has been translated into most European languages; and his works have been collected together, and printed in two volumes folio.

BUONOCARSI, or **PIERINO DEL VAGA**. See **PIERINO**.

BUOY, in sea affairs, a sort of close cask, or block of wood, fastened by a rope to the anchor, to determine the place where the anchor is situated, that the ship may not come too near it, to entangle her cable about the stock or the flukes of it.

Buoys are of various kinds; as,

Can-Buoys: these are in the form of a cone; and of this construction are all the buoys which are floated over dangerous banks and shallows, as a warning to passing ships, that they may avoid them. They are extremely large, that they may be seen at a distance; and are fastened by strong chains to the anchors which are sunk for this purpose at such places. See Plate CVIII. fig. 6.

Nun-Buoys are shaped like the middle frustum of two cones, abutting upon one common base, being casks, which are large in the middle, and tapering nearly to a point at each end. Plate CVIII. fig. 7.

Wooden-Buoys are solid pieces of timber, sometimes in the shape of a cylinder, and sometimes in that of a nun-buoy; they are furnished with one or two holes, in which to fix a short piece of rope, whose two ends, being spliced together, make a sort of circle or ring called the stop.

Cable-Buoys, are common casks employed to buoy up the cables in different places from rocky ground. In the harbour of Alexandria in Egypt, every ship is moored with at least three cables, and has three or four of these buoys on each cable for this purpose.

Slings of the Buoy, the ropes which are fastened about it, and by which it is hung: they are curiously spliced around it, something resembling the braces of a drum.

To stream the Buoy, is to let it fall from the ship's side into the water; which is always done before they let go the anchor, that it may not be retarded by the buoy-rope as it sinks to the bottom.

Buoy-Rope, the rope which fastens the buoy to the anchor: it should be little more than equal in length to the depth of the water where the anchor lies, as it is intended to float near, or immediately above, the bed of it, that the pilot may at all times know the situation thereof. See Plate XXIX. fig. 1. no 3. where *b* is the anchor, *c* the buoy-rope, and *d* the buoy floating on the surface of the water. The buoy-rope is often extremely useful otherwise, in drawing up the anchor when the cable is broke. It should always, therefore, be of sufficient strength for this purpose, or else the anchor may be lost through negligence.

Buoy of the Nore, is a buoy placed at the mouth of the river Thames, to direct mariners how to avoid a dangerous sand.

BUOYANT, something which, by its aptness to float, bears up other more ponderous and weighty things. See **BUOY**.

BUPALUS, a celebrated sculptor, and native of the island of Chios, was son, grandson, and great-grandson of sculptors. He had a brother, named *Athenis*, of the same profession. They flourished in the 60th Olympiad: and were cotemporary with Hipponax, a poet of an ugly and despicable figure. Our sculptors diverted themselves in representing him under a ridiculous form. But Hipponax wrote so sharp a satire against them, that they hanged themselves, as some say. Pliny, however, does not allow this; but says, on the contrary, that, after Hipponax had taken his revenge, they made several fine statues in several places; particularly a Diana at Chios, which was placed very high, and appeared with a frowning countenance to those that came in, and with a pleasant one to those that went out. There were several statues at Rome made by them; and they worked only in the white marble of the isle of Paros. Pausanias mentions Bupalus as a good architect as well as sculptor; but says nothing of Athenis.

BUPHAGA, in ornithology, a genus belonging to the order of picæ. The beak is straight and quadrangular; the mandibles are gibbous, entire, and the gibbosity is greater on the outside. The feet are of the ambulatory kind. The body is greyish above, and of a dirty yellow below; the tail is shaped like a wedge. There is but one species, viz. the *africana*, a native of Senegal. It frequently perches upon oxen, and picks out the worms from their backs.

BUPHONIA (from *buc* ox, and *phôn* slaughter), in antiquity, an Athenian feast or ceremony, denominated from a bullock slain therein, with quaint formalities. For the origin of the buphonia, we are told it was forbidden by the laws of Attica to kill an ox: but it once happened, at the feast of the *diipolia*, that an ox

Buoyant
||
Buphonia.

Buphthal-
mum
||
Buprestis.

eat the corn, others say the cakes, which had been dressed for the sacrifice. Thaulon the priest, enraged at this, presently killed him, and fled for it. On which the Athenians, fearing the resentment of the gods, and feigning themselves ignorant who had committed the fact, brought the bloody axe before the judges, where it was solemnly arraigned, tried, found guilty, and condemned. And, in memory of this event, a feast was instituted under the denomination of *buphonia*. In which it was still customary for the priest to fly, and judgment to be given about the slaughter of the ox.

BUPHTHALMUM, OX-EYE: A genus of the polygamia superflua order, belonging to the syngenesia class of plants; and in the natural method ranking under the 49th order, *Compositæ*. The receptacle is paleaceous: the pappus an indifferent rim; the seeds, especially those of the radius, emarginated on the sides; the stigmata of the hermaphrodite florets undivided. There are ten species; of which the following are the most remarkable.

Species. 1. The *helianthoides*, a native of North America. This hath a perennial root, and an annual stalk, which rises six or eight feet high, garnished at each joint with two oblong heart-shaped leaves, which have three longitudinal veins, and the base on one side shorter than the other. The flowers come out at the extremities of the branches, and are of a bright yellow colour, resembling a small sun-flower. 2. The *arborescens*, rises with several woody stems to the height of eight or ten feet, garnished with leaves very unequal in size; some are narrow and long, others are broad and obtuse; these are intermixed at the same joint, and often at the intermediate one; they are green, and placed opposite. The flowers are produced at the ends of the branches; they are of a pale yellow colour, and have scaly empalements.

Culture. All the species may be propagated by seeds; and those which do not, by parting their roots, or cutting of their branches. Some of the species are tender, and require to be raised on a hot-bed.

BUPLEURUM, HARE'S EAR, or Thorough-wax: A genus of the digynia order, belonging to the pentandria class of plants; and in the natural method ranking under the 45th order, *Umbellatæ*. The involucre of the partial umbels are large in proportion, and pentaphyllous; the petals involuted or rolled inwards; the fruit roundish, compressed, and striated. The principal species is the fruticosum or shrubby Ethiopian hartwort. This rises with a shrubby stem, dividing into numerous branches, forming a bushy head five or six feet high, adorned with oblong, oval, entire leaves of a pale green colour, placed alternate, with yellow flowers in umbels at the ends of the branches, which appear in July and August, and are sometimes succeeded by ripe seeds. It may be propagated by cuttings.

BUPRESTIS, in zoology, a genus of insects belonging to the order of coleoptera. The antennæ are setaceous, and as long as the thorax: The head is half drawn back within the thorax; to which may be added, that the antennæ are ferrated: The mouth is armed with jaws, and furnished with palpi: The elytra are margined, and cover the abdomen; and the tarsi have five articulations: The feet are saltatorii. There are 27 species of this insect, most of them natives of

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the Indies. The French have given the name of *Richard* to this genus, on account of the beautiful rich colours with which most of the insects belonging to it are adorned. Insects of this genus are not common in England. They are of the richest splendor; and some appear, when alive, to be united in colour with the resplendent particles of emeralds, rubies, diamonds, and gold. Applied to the microscope, the splendor is so great as to dazzle the eye. The *guttata* is one of the most oblong species. The whole body is green and gold, with a bluish cast underneath; but what distinguishes it, are four white dents or depressed spots that are seen upon the elytra, two upon each. One of these dots is on the outward rim of the elytrum, about the middle of it, near the abdomen, and is the larger one. The other is on the inner edge, close to the future, about three-fourths of that future downwards, and exactly opposite its fellow on the other elytrum. This latter one is the smaller. The whole upper part of the insect, viewed through a glass, appears finely dotted. This species has been found in timber-yards.

BUQUOI, a town of Artois, in the French Netherlands, situated on the confines of Picardy. E. Long. 2. 40. N. Lat. 50. 12.

BUR, a broad ring of iron, behind the place made for the hand on the spears used formerly in tilting; which bur was brought to rest when the tilter charged his spear.

BURBAS, in commerce, a small coin at Algiers, with the arms of the dey struck on both sides: it is worth half an asper.

BURCHAUSEN, a town of Germany, in the Lower Bavaria, situated on the river Saltz. E. Long. 13. 25. N. Lat. 48. 5.

BURDEGALA, or **BURDIGALA**, (anc. geog.); a trading port town of Aquitania, situated on a lake of the sea, formed by the mouth of the Garumna. It was a famous seat of the Muses, as appears by Ausonius's book entitled *Professores*; and birth-place of Ausonius: Now Bourdeaux, capital of the Bourdelois, on the river Garonne. W. Long. 40', Lat. 44° 54'.

BURDEN, or **BURDON**, in music, the drone or bass, and the pipe or string which plays it: hence that part of a song, that is repeated at the end of every stanza, is called the *burden* of it.—A chord which is to be divided, to perform the intervals of music, when open and undivided, is also called the *burden*.

BURDEN properly signifies a heavy weight or load. Ringelberg recommends the bearing burdens as the best sort of exercise: especially to strengthen men of study. To this end, he had a gown lined with plates of lead, which he could just lift with both his hands. This load he bore six or seven days together, either increasing or diminishing it as he found occasion; by which means he could both write and exercise at the same time.

BURDEN also denotes a fixed quantity of certain commodities. A burden of gad-steel is two score, or 120 pounds.

BURDEN of a Ship is its contents, or number of tons it will carry. The burden of a ship may be determined thus: Multiply the length of the keel, taken within board, by the breadth of the ship, within board, taken from the midship-beam, from plank to plank; and

5 F

multiply

Buquoi
||
Burden.

Burdoek
||
Burgage.

multiply the product by the depth of the hold, taken from the plank below the keelson, to the under part of the upper deck plank; and divide the last product by 94: the quotient is the content of the tonnage required. See FREIGHT.

BURDOCK, in botany. See ARCTIUM and XANTHIUM.

BURELL, or CITTA BURRELLA, a town of Italy in the kingdom of Naples, and in Abruzzo Citra, near the river Sangro. E. Long. 15. 5. N. Lat. 41. 56.

BUREN, a town of the United Provinces, in Guelderland. It gives the title of count de Buren to the prince of Orange. E. Long. 5. 22. N. Lat. 52. 0.

BUREN, a town of Germany, in the circle of Westphalia, and bishopric of Paderborn. It is seated on the river Alme, five miles south of Paderborn. E. Long. 8. 25. N. Lat. 51. 35.

BURFORD, a town of Oxfordshire, seated on an ascent on the river Windrush, is a handsome place, chiefly noted for the making of saddles. The Downs near it, noted for horse-races, are of great advantage to the town. Burford is an earldom in the family of St Albans. It is 23 miles west-north-west of Banbury, and 85 west of London. W. Long. 1. 43. N. Lat. 51. 40.

BURG, BURGH, or DUN, in northern topography. See DUN.

BURG, a town of Lincolnshire, seated in a marsh 12 miles south-east of Boston, and 127 north of London. E. Long. 0. 5. N. Lat. 53. 12.

BURG, a town of the Dutch Netherlands, in Zutphen, seated on the Old Iffel, 18 miles east of Nimeguen. E. Long. 6. 12. N. Lat. 52. 0.

BURGH-Castle, or Borough castle, a fortress on the edge of the county of Suffolk, three miles west of Yarmouth, where the rivers Yare and Waveny meet. It was formerly a delightful place; but now only the ruins of its walls remain, near which Roman coins are often dug up.

† See Soc-
cage.

BURGAGE, or Tenure in BURGAGE, is where the king, or other person, is lord of an ancient borough, in which the tenements are held by a rent certain. It is indeed only a kind of town soccage; as common soccage †, by which other lands are holden, is usually of a rural nature. A borough is distinguished from other towns by the right of sending members to parliament; and where the right of election is by burgage-tenure, that alone is a proof of the antiquity of the borough. Tenure in burgage, therefore, or burgage-tenure, is where houses or lands which were formerly the site of houses in an ancient borough, are held of some lord in common soccage, by a certain established rent. And these seem to have withstood the shock of the Norman encroachments principally on account of their insignificance, which made it not worth while to compel them to an alteration of tenure, as 100 of them put together would scarce have amounted to a knight's fee. Besides, the owners of them, being chiefly artificers, and persons engaged in trade, could not with any tolerable propriety be put on such a military establishment as the tenure in chivalry was. The free soccage, therefore, in which these tenements are held, seems to be plainly a remnant of Saxon liberty; which may also account for the great variety of customs affecting many of these tenements so held in ancient burgage; the

principal and most remarkable of which is that called *Burgau* Borough English. See the article *Borough-English*.

BURGAU, in natural history, the name of a large species of sea-snail, of the lunar or round-mouthed kind. It is very beautifully lined with a coat, of the nature of the mother-of-pearl; and the artificers take this out, to use under the name of mother-of-pearl, though some call it after the name of the shell they take it from, *burgaudine*.

BURGAUDINE, the name given by the French artificers to what we call mother-of-pearl. In their works, they do not use the common nacre-shell for this, but the lining of the American burgau. Hence some call the mother-of-pearl *burgaudine*, and others the *burgaudine* mother-of-pearl.

BURGDORF, a handsome and pretty large town of Switzerland, in the canton of Bern, seated on an eminence. The river Emma is about a pistol-shot from the town; and as it often changes its bed, it frequently does a great deal of mischief. It runs at the foot of a rock of a prodigious height, and there is a stone-bridge over it. Near the town there is a sulphureous spring which supplies their baths with water, which is good against palsies and diseases of the nerves. E. Long. 7. 35. N. Lat. 47. 6.

BURGEON, in gardening, a knot or button put forth by the branch of a tree in the spring. The word is formed from the French *bourgeon*, which signifies the same, formed from the Latin *burrio*, of *burra*. Bourgeois amounts to the same with what is otherwise called eye, bud, or germ. Frosts are chiefly dangerous when the burgeons begin to appear. The burgeons have the same skin, same pith, same ligneous body, and the same insertions as the stalk; that is, all the parts have the same in both, only more contracted in the former.

BURGESS, an inhabitant of a borough, or walled town, or one who possesses a tenement therein. The word is also applied to the magistrates of some towns; as the bailiff and burgesses of Leominster.

Anciently, burgesses were held in great contempt; being reputed servile, base, and unfit for war; so that the gentry were not allowed to intermarry in their families, or fight with them; but, in lieu thereof, were to appoint champions. A burgess's son was reputed of age, when he could distinctly count money, measure cloth, &c.

BURGESS is now ordinarily used for the representative of a borough-town in parliament. Burgesses are supposed to represent the mercantile part, or trading interest of the nation. They were formerly allowed, by a rate established in the reign of Edward III. two shillings a day as wages. It is much to be regretted, that the members for boroughs bear above a quadruple proportion to those for counties. The right of election of burgesses depends on several local charters and customs: though, by 2 Geo. II. c. 24. the right for the future shall be allowed according to the last determination of the house of commons concerning it: and by 3 Geo. III. c. 15. no freeman, except such as claim by birth, servitude, or marriage, shall be intitled to vote, unless he hath been admitted to his freedom twelve months before. No person is eligible as a burgess, who hath not a clear estate of L. 300 a-year.

BURGGRAVE, properly denotes the hereditary governor

governor

Burgh
||
Burglary.

governor of a castle, or fortified town, chiefly in Germany. The word is compounded of *bourg*, town, and *graf*, or *grave count*. The burggraves were originally the same with what we otherwise call *castellans*, or *comites castellani*; but their dignity was considerably advanced under Rudolph of Hapsburgh; before his time they were ranked only as counts, and below the princes, but under him began to be esteemed on a footing with princes. In some parts, the dignity is much degenerated, especially in the palatinate. There were formerly, according to Leti, fifteen families who enjoyed the title of burggraves, thirteen of which are now extinct. But this is differently represented by others. In Bohemia the title of burggrave is given to the chief officer, or to him that commands in quality of viceroy. In Prussia, the burggrave is one of the four chief officers of the province. In Guelderland, the burggrave of Nimeguen is president of the states of the province.

BURGH. See BOROUGH.

BURGH, or DUN. See DUN.

BURGH-BOTE signifies contribution towards the building or repairing of castles, or walls, for the defence of a borough or city.

By the law of king Athelstan, the castles and walls of towns were to be repaired, and burgh-bote levied every year within a fortnight after rogation days. No person whatever was exempt from this service; the king himself could not exempt a man from burgh-bote: yet, in after times, exemptions appear to have been frequently granted; inasmuch, that, according to Cowel, the word *burgh-bote* came to be chiefly used to denote not the service but the liberty or exemption from it.

BURGH-Breche, or *brech*, a fine imposed on the community of a town, or burgh, for the breach of peace among them.

BURGH-Mails, were yearly payments to the crown of Scotland, introduced by Malcolm III. and resembling the *Fee-farm* rents of burghs in England. See MAIL.

BURGH-Master, an officer in the tin-mines, who directs and lays out the meers for the workmen, &c. otherwise denominated bailiff and bar-master.

BURGERMASTERS. See BURGOMASTER.

BURGHMOTE, the court of a borough. By the laws of king Edgar, the burghmote was to be held thrice in the year; by those of Henry I. 12 times.

BURGLARY, or NOCTURNAL HOUSE-BREAKING, (*burgi latrocinium*), which by the ancient English law was called *hamefucken*, a word also used in the law of Scotland, but in a somewhat different sense, has always been looked upon as a very heinous offence: not only because of the abundant terror it carries with it, but also as it is a forcible invasion and disturbance of that right of habitation which every individual might acquire even in a state of nature; an invasion which, in such a state, would be sure to be punished with death, unless the assailant were stronger. But, in civil society, the laws come into the assistance of the weaker party: and, besides that they leave him this natural right of killing the aggressor if he can, they also protect and avenge him in case the assailant is too powerful. And the law has so particular and tender a regard to the immunity of a man's house, that it styles it his *castle*, and will never suffer it to be violated with impunity; agreeing herein with the sentiments of ancient Rome. For this reason no outward doors can in gene-

ral be broken open to execute any civil process; tho' in criminal causes the public safety supercedes the private †. Hence also in part arises the animadversion of the law upon eaves-droppers, nufancers, and incendiaries: and to this principle it must be assigned, that a man may assemble people together lawfully (at least if they do not exceed 12), without danger of raising a riot, rout, or unlawful assembly, in order to protect his house; which he is not permitted to do in any other case.

The definition of a burglar, as given us by Sir Edward Coke, is, "he that by night breaketh and entereth into a mansion house, with intent to commit a felony." In this definition there are four things to be considered; the *time*, the *place*, the *manner*, and the *intent*.

1. The *time* must be by night, and not by day; for in the day-time there is no burglary; *i. e.* if there be day-light or crepusculum enough, begun or left, to discern a man's face withal. But this does not extend to moonlight; for then many midnight burglaries would go unpunished: and besides, the malignity of the offence does not consist so much in its being done in the dark, as at the dead of night; when all the creation, except beasts of prey, are at rest; when sleep has disarmed the owner, and rendered his castle defenceless.

2. As to the *place*. It must be, according to Sir Edward Coke's definition, in a mansion-house: for no distant barn, warehouse, or the like, are under the same privileges, nor looked upon as a man's castle of defence; nor is a breaking open of houses wherein no man resides, and which for the time being are not mansion-houses, attended with the same circumstances of midnight terror. A house, however, wherein a man sometimes resides, and which the owner hath left only for a short season, *animo revertendi*, is the object of burglary, though no one be in it at the time of the fact committed. And if the barn, stable, or warehouse, be parcel of the mansion-house, though not under the same roof or contiguous, a burglary may be committed therein; for the capital house protects and privileges all its branches and appurtenants, if within the curtilage or homestead. A chamber in a college, or an inn of court, where each inhabitant hath a distinct property, is, to all other purposes as well as this, the mansion-house of the owner. So also is a room or lodging in any private house, the mansion for the time being of the lodger; if the owner doth not himself dwell in the house, or if he and the lodger enter by different outward doors. But if the owner himself lies in the house, and hath but one outward door at which he and his lodgers enter, such lodgers seem only to be inmates, and all their apartments to be parcel of the one dwelling-house of the owner.

3. As to the *manner* of committing burglary: there must be both a breaking and an entry to complete it. But they need not be both done at once; for if a hole be broken one night, and the same breakers enter the next night through the same, they are burglars. There must be an actual breaking; as, at least, by breaking or taking out the glass of, or otherwise opening, a window; picking a lock, or opening it with a key; nay, by lifting up the latch of a door, or unloosing any other fastening which the owner has provided. But if a person leaves his doors or windows open, it is his own folly

Burglary.
† See the
article *Ar-*
rest.

Burglary
Burgoo.

and negligence; and if a man enters therein, it is no burglary; yet, if he afterwards unlocks an inner or chamber door, it is so. But to come down a chimney is held a burglarious entry: for that is as much closed as the nature of things will permit. So also, to knock at a door, and, upon opening it, to rush in with a felonious intent; or under pretence of taking lodgings, to fall upon the landlord and rob him; or to procure a constable to gain admittance in order to search for traitors, and then to bind the constable and rob the house; all these entries have been adjudged burglarious, though there was no actual breaking: for the law will not suffer itself to be trifled with by such evasions, especially under the cloak of legal process. As for the entry, any the least degree of it, with any part of the body, or with an instrument held in the hand, is sufficient: as, to step over the threshold, to put a hand or hook in at a window to draw out goods, or a pistol to demand one's money, are all of them burglarious entries. The entry may be before the breaking, as well as after; for by statute 12 Anne c. 7. if a person enters into the dwelling house of another, without breaking in either by day or by night, with an intent to commit felony, or, being in such house, shall commit any felony; and shall in the night break out of the same; this is declared to be burglary.

4. As to the *intent*; it is clear that such breaking and entry must be with a felonious intent, otherwise it is only a trespass. And it is the same, whether such intention be actually carried into execution, or only demonstrated by some attempt or overt act, of which the jury is to judge.

Burglary is a felony at common law, but within the benefit of clergy. Burglary in any house belonging to the plate-glass company, with intent to steal the stock or utensils, is by statute 13 Geo. III. c. 38. declared to be single felony, and punished with transportation seven years.

BURGOMASTER, BURGHMASTER, *Bourgermeister*, or *Burgmeister*, the chief magistrate of the great towns in Flanders, Holland, and Germany. The power and jurisdiction of the burgomaster is not the same in all places, every town having its particular customs and regulations: at Amsterdam there are four chosen by the voices of all those people in the senate who have either been burgomasters or echevins. They dispose of all under offices that fall in their time, keep the key of the bank, and enjoy a salary but of 500 guildres; all feasts, public entertainments, &c. being defrayed out of the common treasury. The word is formed from the two Flemish words, *borger*, *burgess*, or *citizen*; and *meister*, *master*. Some express it in Latin by *consul*, others by *senator*.—Mr Brenau observes, that *burghermeister* in Holland, answers to what is called *alderman* and *sheriff* in England, *attorney* at Compeigne, *capitoul* at Tholouse, *consul* at Languedoc, &c.

BURGOO, or BURGOUT, a sea-faring dish, made of whole oatmeal, or groats, boiled in water till they burst; then mixed with butter. It is a cheap and strengthening diet. Burgoo, otherwise called *loblolly*, is held by Cockburn very proper to correct that thickness of humours and costiveness to which the other diet of sailors much disposes them. Yet the burgoo victualling is the least liked of all their provisions, because

of the scanty allowance of butter to it. The same author thinks it might be worth the consideration of those to whom the care of the seamen is committed, to contrive to render this food more agreeable to them.

BURGOS, a city of Spain, the capital of Old Castile, with an archbishop's see, erected in 1574. It is surrounded with mountains, which render the air very cold nine months in the year, and the other three excessive hot. It is seated on the declivity of a hill, on the top of which there is a strong castle, and the lower part of the town is watered by the river Alançon. The principal avenue to the city is by a handsome bridge over this river, which leads to a beautiful gate, adorned with the statues of several kings of Spain. The town is large and populous; but the houses are ill built, and the streets are narrow and dirty, except some few, especially that which leads to the cathedral. There are several squares, adorned with fountains and statues. The great square in the middle of the city is surrounded with fine houses, with piazzas to each. The cathedral church is a master-piece of Gothic architecture, and one of the finest in all Spain. The church of the Augustines is remarkable for its beautiful and rich chapel of the holy crucifix. There are several fine convents and nunneries; one of which last contains 150 nuns, who must all be of noble extraction. They have likewise a royal hospital, very richly endowed; and at this place they speak the best Castilian, that is, the purest Spanish in the kingdom. W. Long. 4. 7. N. Lat. 42. 20.

BURGUNDIONES, a part or branch of the Vindili or Wandili. Cluverius places them about the Warta, a river of Poland: though the conjectures on the seat of these people are doubtful; and no wonder, because the Roman expeditions terminated at the Elbe. They afterwards removed to the Cisalpin, Germany, and at length to Celtic Gaul, and gave name to the duchy and county of Burgundy.

BURGUNDY, a province or government of France. It contains, besides the government of Burgundy, La Bresse, La Bugy, and the district of Gez; having Champagne on the north, Lyonnois on the south, Franche Comte on the east, and Nivernois and Bourbonnois on the west. Its length from north to south is about 45 leagues, and its breadth from east to west about 30. It is very fertile in corn, wine, fruit, and tobacco; being watered by the Seine, the Dehune which falls into the Soane, the Brebince or Bourbince, the Armançon, the Oucke, and the Tille. There are some noted mineral springs in it, with subterraneous lakes, and plenty of ochre. For a long time it had dukes of its own, subordinate to the crown of France; but at last, Louis XI. upon the failure of the heirs male, seized upon it, and annexed it to his crown. The whole government lies within the jurisdiction of the parliament of Burgundy, except a small part that is subject to that of Paris. The states meet regularly every three years, to raise the money required of them by the court. The principal places are Dijon, Auxerre, Autun, Bourbon, L'Ancy, &c.

BURIAL, the interment of a deceased person.

The rites of burial are looked upon in all countries, and at all times, as a debt so sacred, that such as neglected to discharge it were thought accursed: hence the

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Burial

the Romans called them *justa*, and the Greeks *νομία*, *δικαιοσύνη*, words implying the inviolable obligations which nature has laid upon the living to take care of the obsequies of the dead. Nor are we to wonder, that the ancient Greeks and Romans were extremely solicitous about the interment of their deceased friends, since they were strongly persuaded, that their souls could not be admitted into the Elysian fields till their bodies were committed to the earth; and if it happened that they never obtained the rites of burial, they were excluded from the happy mansions for the term of 100 years. For this reason it was considered as a duty incumbent upon all travellers who should meet with a dead body in their way, to cast dust or mould upon it three times; and of these three handfuls one at least was cast upon the head. The ancients likewise considered it as a great misfortune if they were not laid in the sepulchres of their fathers; for which reason, such as died in foreign countries had usually their ashes brought home, and interred with those of their ancestors. But notwithstanding their great care in the burial of the dead, there were some persons whom they thought unworthy of that last office, and to whom therefore they refused it: such were, 1. Public or private enemies. 2. Such as betrayed or conspired against their country. 3. Tyrants, who were always looked upon as enemies to their country. 4. Villains guilty of sacrilege. 5. Such as died in debt, whose bodies belonged to their creditors. And, 6. Some particular offenders, who suffered capital punishment.

Of those who were allowed the rites of burial, some were distinguished by particular circumstances of disgrace attending their interment: thus persons killed by lightning were buried apart by themselves, being thought odious to the gods; those who wasted their patrimony forfeited the right of being buried in the sepulchres of their fathers; and those who were guilty of self-murder were privately deposited in the ground, without the accustomed solemnities. Among the Jews, the privilege of burial was denied only to self-murderers, who were thrown out to rot upon the ground. In the Christian church, though good men always desired the privilege of interment, yet they were not, like the heathens, so concerned for their bodies, as to think it any detriment to them, if either the barbarity of an enemy, or some other accident, deprived them of this privilege. The primitive Christian church denied the more solemn rites of burial only to unbaptized persons, self-murderers, and excommunicated persons who continued obstinate and impenitent, in a manifest contempt of the church's censures.

The place of burial among the Jews was never particularly determined. We find they had graves in the town and country, upon the highways, in gardens, and upon mountains. Among the Greeks, the temples were made repositories for the dead in the primitive ages; yet the general custom in latter ages, with them, as well as with the Romans and other heathen nations, was to bury their dead without their cities, and chiefly by the highways. Among the primitive Christians, burying in cities was not allowed for the first 300 years, nor in churches for many ages after, the dead bodies being first deposited in the atrium or churchyard, and porches and porticos of the church: hereditary burying-places were forbidden till the 12th century. As to

the time of burial, with all the ceremonies accompanying it, see the article *FUNERAL-Rites*.

BURICK, a town of Germany, in the circle of Westphalia, and duchy of Cleves, subject to the king of Prussia. It was taken by the French in 1672, who demolished the fortifications. It is agreeably seated on the river Rhine, over against Wesel, in E. Long. 6. 8. N. Lat. 51. 38.

BURIDAN (John), a native of Bethune, in Artois, was one of the most celebrated philosophers of the 14th century. He taught in the university of Paris with great reputation; and wrote commentaries on logic, morality, and Aristotle's metaphysics. Aventinus relates, that he was a disciple of Ockam; and that, being expelled Paris by the power of the Realists, which was superior to that of the Nominalists, he went into Germany, where he founded the university of Vienna. From him came the proverb of the *ass of Buridan*, so famous in the schools. Buridan supposed an hungry ass fixed at an exactly equal distance between two bushels of oats: or an ass, as much pressed by thirst as hunger, between a bushel of oats and a pail of water, each of them acting equally on his senses. Having made this supposition, he desired to know what the ass would do? If he was answered that he would remain immovable, then he concluded he would die of hunger between two bushels of oats, or of both hunger and thirst, with both corn and water within his reach. This appeared absurd, and brought the laughter on his side; but if it was replied, that the ass would not be so stupid as to die of hunger or thirst in such a situation, Then (said he), the ass has free will, or is it possible that of two equal weights one should outweigh the other? These two consequences appeared equally absurd; and thus Buridan, by this sophism, perplexed the philosophers, and his ass became famous in the schools.

BURKITT (William), a celebrated commentator on the New Testament, was born at Hitcham in Northamptonshire, July 25th 1650, and educated at Pembroke-hall, Cambridge. He entered young upon the ministry, being ordained by bishop Reynolds: and the first employment which he had was at Mildenhall in Suffolk, where he continued 21 years a constant preacher, first as a curate, and afterwards as rector of that church. In the year 1692, he had a call to the vicarage of Dedham in Essex, where he continued to the time of his death, which happened in the latter end of October 1703. He was a pious and charitable man. He made great collections for the French Protestants in the years 1687, &c. and by his great care, pains, and charges, procured a worthy minister to go and settle in Carolina. Among other charities, by his last will and testament, he bequeathed the house wherein he lived, with the lands thereunto belonging, to be an habitation for the lecturer that should be chosen from time to time to read the lecture at Dedham. Besides his Commentary upon the New Testament, written in the same plain, practical, and affectionate manner in which he preached, he wrote a volume, intitled, *The poor man's help, and rich man's guide*.

BURLAW. See *Br-Law*.

BURLEIGH. See *CECIL*.

BURLESQUE, a species of composition, which, though a great engine of ridicule, is not confined to that.

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that subject; for it is clearly distinguishable into burlesque that excites laughter merely, and burlesque that excites derision or ridicule. A grave subject, in which there is no impropriety, may be brought down by a certain colouring so as to be risible, as in Virgil's *travestie*; the author first laughs at every turn in order to make his readers laugh. The *Lutrin* is a burlesque poem of the other sort, laying hold of a low and trifling incident to expose the luxury, indolence, and contentious spirit, of a set of monks. Boileau, the author, turns the subject into ridicule, by dressing it in the heroic style, and affecting to consider it as of the utmost dignity and importance. Though ridicule is the poet's aim, he always carries a grave face, and never once betrays a smile. The opposition between the subject and the manner of handling it, is what produces the ridicule; and therefore, in a composition of this kind, no image professedly ludicrous ought to have quarter, because such images destroy the contrast.

Though the burlesque that aims at ridicule produces its effects by elevating the style far above the subject; yet the poet ought to confine himself to such images as are lively, and readily apprehended. A strained elevation, soaring above the ordinary reach of fancy, makes not a pleasant impression. The mind is soon disgusted by being kept long on the stretch. Machinery may be employed in a burlesque poem, such as the *Lutrin*, the *Dispensary*, or *Hudibras*, with more success and propriety than in any other species of poetry. For burlesque poems, though they assume the air of history, give entertainment chiefly by their pleasant and ludicrous pictures: it is not the aim of such a poem to raise sympathy; and for that reason, a strict imitation of nature is not necessary. And hence, the more extravagant the machinery in a ludicrous poem, the more entertainment it affords.

BURLINGTON, a sea-port town in the east riding of Yorkshire, situated on the German ocean, about 37 miles north-east of York. E. Long. 10. and N. Lat. 54. 15. It gave the title of *earl* to a branch of the noble family of Boyle, but the earldom is now extinct.

New-BURLINGTON, the capital of New-Jersey, in North America; situated in an island of Delaware river, about 20 miles north of Philadelphia. W. Long. 74. 0. N. Lat. 40. 40.

BURMAN (Francis), a Protestant minister, and learned professor of divinity at Utrecht, was born at Leyden in 1628; and died on the 10th of November 1679, after having published a course of divinity, and several other works.

He is not to be confounded with *Francis Burman*, his son; or with *Peter Burman*, a laborious commentator on Phædrus, Lucan, Petronius, and other profane authors, who died in 1741.

BURN, in medicine and surgery, an injury received in any part of the body by fire. See **SURGERY**.

BURNET (Gilbert), bishop of Salisbury in the latter end of the 17th century, was born at Edinburgh, in 1643, of an ancient family in the shire of Aberdeen. His father being bred to the law, was, at the restoration of king Charles II. appointed one of the lords of session, with the title of *lord Crimond*, in reward for his constant attachment to the royal party during the troubles of Great Britain. Our author, the youngest son

of his father, was instructed by him in the Latin tongue: Burnet. at ten years of age he was sent to continue his studies at Aberdeen, and was admitted M. A. before he was 14. His own inclination led him to the study of the civil and feudal law; and he used to say, that it was from this study he had received more just notions concerning the foundations of civil society and government, than those which some divines maintain. About the year after, he changed his mind, and began to apply to divinity, to the great satisfaction of his father. He was admitted preacher before he was 18; and Sir Alexander Burnet, his cousin-german, offered him a benefice; but he refused to accept of it.

In 1663, about two years after the death of his father, he came into England; and after six months stay at Oxford and Cambridge, returned to Scotland; which he soon left again to make a tour for some months, in 1664, in Holland and France. At Amsterdam, by the help of a Jewish rabbi, he perfected himself in the Hebrew language; and likewise became acquainted with the leading men of the different persuasions tolerated in that country; as Calvinists, Arminians, Lutherans, Anabaptists, Brownists, Papists, and Unitarians; amongst each of which he used frequently to declare, he met with men of such unfeigned piety and virtue, that he became fixed in a strong principle of universal charity, and an invincible abhorrence of all severities on account of religious dissensions.

Upon his return from his travels, he was admitted minister of Salton; in which station he served five years in the most exemplary manner. He drew up a memorial, in which he took notice of the principal errors in the conduct of the Scots bishops, which he observed not to be conformable to the primitive institution; and sent a copy of it to several of them. This exposed him to their resentments: but, to show he was not actuated with a spirit of ambition, he led a retired course of life for two years; which so endangered his health, that he was obliged to abate his excessive application to study. In 1669, he published his "Model and free conference between a conformist and non-conformist." He became acquainted with the duchess of Hamilton, who communicated to him all the papers belonging to her father and her uncle; upon which he drew up the "Memoirs of the dukes of Hamilton." The duke of Lauderdale, hearing he was about this work, invited him to London, and introduced him to king Charles II. He returned to Scotland, and married the lady Margaret Kennedy, daughter of the earl of Cassilis; a lady of great piety and knowledge, highly esteemed by the presbyterians, to whose sentiments she was strongly inclined. As there was some disparity in their ages, that it might remain past dispute that this match was wholly owing to inclination, and not to avarice or ambition, the day before their marriage our author delivered the lady a deed, whereby he renounced all pretensions to her fortune, which was very considerable, and must otherwise have fallen into his hands, she herself having no intention to secure it. The same year he published his "Vindication of the authority, constitution, and laws of the church and state of Scotland;" which at that juncture was looked upon as so great a service, that he was again offered a bishopric, and a promise of the next vacant archbishopric; but

Burnet. but did not accept of it, because he could not approve of the measures of the court, the grand view of which he saw to be the advancement of popery.

Mr Burnet's intimacy with the duke of Hamilton and Lauderdale occasioned him to be frequently sent for by the king and the duke of York, who had conversations with him in private. But Lauderdale conceiving a resentment against him on account of the freedom with which he spoke to him, represented at last to the king, that Dr Burnet was engaged in an opposition to his measures. Upon his return to London, he perceived that these suggestions had entirely thrown him out of the king's favour, though the duke of York treated him with greater civility than ever, and dissuaded him from going to Scotland. Upon this, he resigned his professorship at Glasgow, and staid at London. About this time the living at Cripple-gate being vacant, the dean and chapter of St Paul's (in whose gift it was), hearing of his circumstances, and the hardships he had undergone, sent him an offer of the benefice; but as he had been informed of their first intention of conferring it on Dr Fowler, he generously declined it. In 1675, at the recommendation of lord Hollis, whom he had known in France, ambassador at that court, he was, by Sir Herbottle Grimstone, master of the rolls, appointed preacher of the chapel there, notwithstanding the opposition of the court. He was soon after chosen a lecturer of St Clement's, and became one of the preachers that were most followed in town. In 1697, he published his *History of the Reformation*, for which he had the thanks of both houses of parliament. The first part of it was published in 1679, and the second in 1681. Next year he published an abridgement of these two parts.

Mr Burnet about this time happened to be sent for to a woman in sickness, who had been engaged in an amour with the earl of Rochester. The manner of which he treated her during her illness, gave that lord a great curiosity for being acquainted with him. Whereupon, for a whole winter, he spent one evening in a week with Dr Burnet, who discoursed with him upon all those topics upon which sceptics and men of loose morals attack the Christian religion. The happy effect of these conferences occasioned the publication of his account of the life and death of that earl. In 1682, when the administration was changed in favour of the duke of York, being much resorted to by persons of all ranks and parties, in order to avoid returning visits, he built a laboratory, and went for above a year through a course of chemical experiments. Not long after, he refused a living of 300l. a-year offered him by the earl of Essex, on the terms of his not residing there, but in London. When the inquiry concerning the popish plot was on foot, he was frequently sent for and consulted by king Charles with relation to the state of the nation. His majesty offered him the bishopric of Chichester, then vacant, if he would engage in his interests; but he refused to accept it on these terms. He preached at the Rolls till 1684, when he was dismissed by order of the court. About this time he published several pieces.

On king James's accession to the throne, having obtained leave to go out of the kingdom, he first went to Paris, and lived in great retirement, till contracting an acquaintance with brigadier Stoupe, a Protestant

gentleman in the French service, he made a tour with him into Italy. He met with an agreeable reception at Rome. Pope Innocent XI. hearing of our author's arrival, sent the captain of the Swiss guards to acquaint him he would give him a private audience in bed, to avoid the ceremony of kissing his holiness's slipper. But Dr Burnet excused himself as well as he could. Some disputes which our author had here concerning religion, beginning to be taken notice of, made it proper for him to quit the city; which, upon an intimation given him by prince Borghese, he accordingly did.

He pursued his travels through Switzerland and Germany. In 1688, he came to Utrecht, with an intention to settle in some of the seven provinces. There he received an invitation from the prince and princess of Orange (to whom their party in England had recommended him) to come to the Hague, which he accepted. He was soon made acquainted with the secret of their counsels, and advised the fitting out of a fleet in Holland sufficient to support their designs and encourage their friends. This, and the *Account of his Travels*, in which he endeavoured to blend Popery and tyranny together, and represent them as inseparable with some papers reflecting on the proceedings of England, that came out in single sheets, and were dispersed in several parts of England, most of which Mr Burnet owned himself the author of, alarmed king James; and were the occasion of his writing twice against him to the princess of Orange, and insisting, by his ambassador, on his being forbid the court; which, after much importunity, was done, though he continued to be trusted and employed as before, the Dutch minister consulting him daily. To put an end to these frequent conferences with the ministers, a prosecution for high treason was set on foot against him both in England and Scotland. But Burnet receiving the news thereof before it arrived at the States, he avoided the storm, by petitioning for, and obtaining without any difficulty, a bill of naturalization, in order to his intended marriage with Mary Scot, a Dutch lady of considerable fortune, who, with the advantage of birth, had those of a fine person and understanding.

After his marriage with this lady, being legally under the protection of Holland, when Mr Burnet found king James plainly subverting the constitution, he omitted no method to support and promote the design the prince of Orange had formed of delivering Great Britain, and came over with him in quality of chaplain. He was soon advanced to the see of Salisbury. He declared for moderate measures with regard to the clergy, who scrupled to take the oaths, and many were displeased with him for declaring for the toleration of nonconformists. His pastoral letter concerning the oaths of allegiance and supremacy to king William and queen Mary, 1689, happening to touch upon the right of conquest, gave such offence to both houses of parliament, that it was ordered to be burnt by the hands of the common executioner. In 1698 he lost his wife by the small-pox; and, as he was almost immediately after appointed preceptor to the duke of Gloucester, in whose education he took great care, this employment, and the tender age of his children, induced him the same year to supply her loss by a marriage with Mrs Berkeley.

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ly, eldest daughter of Sir Richard Blake, knight. In 1699 he published his Exposition of the 39 articles; which occasioned a representation against him in the lower house of convocation in the year 1701; but he was vindicated in the upper house. His speech in the house of lords in 1704 against the bill to prevent occasional conformity was severely attacked. He died in 1715, and was interred in the church of St James, Clerkenwell, where he has a monument erected to him. He formed a scheme for augmenting the poor livings; which he pressed forward with such success, that it ended in an act of parliament passed in the 2d year of queen Anne, "for the augmentation of the livings of the poor clergy."

BURNET (Thomas), a polite and learned writer in the end of the 17th century, was born in Scotland, but educated in Cambridge under the tuition of Mr John Tillotson, afterwards archbishop of Canterbury. In the beginning of 1685, he was made master of Sutton's hospital in London, after which he entered into holy orders. During the reign of king James, he made a noble stand in his post as master of the charter-house against the encroachments of that monarch, who would have imposed one Andrew Popham, a Papist, as a pensioner upon the foundation of that house. In 1680 he published his *Telluris theoria sacra*, so universally admired for the purity of the style and beauty of the sentiments, that king Charles gave encouragement to a translation of it into English. This theory was however attacked by several writers. In 1692 he published his *Archæology philosophica*, dedicated to king William, to whom he was clerk of the closet. He died in 1715. Since his death hath been published, his book *De statu mortuorum et resurgentium*, and his treatise *De fide et officiis Christianorum*.

BURNET, in botany. See PÔTERIUM and SANGUISORBA.

BURNHAM, a market-town of Norfolk in England, situated in E. Long. 0. 50. N. Lat. 53. 0.

BURNING, the action of fire on some pabulum or fuel, by which the minute parts thereof are put into a violent motion, and some of them assuming the nature of fire themselves, fly off *in orbem*, while the rest are dissipated in form of vapour or reduced to ashes. See IGNITION.

Extraordinary Cases of BURNING. We have instances of persons burnt by fire kindled within their own bodies. A woman at Paris, who used to drink brandy to excess, was one night reduced to ashes by a fire from within, all but her head and the ends of her fingers. Signora Corn. Zangari, or, as others call her, *Corn. Bandi*, an aged lady, of an unblemished life, near Cesena in Romagna, underwent the same fate in March 1731. She had retired in the evening into her chamber somewhat indisposed; and in the morning was found in the middle of the room reduced to ashes, all except her face, legs, skull, and three fingers. The stockings and shoes she had on were not burnt in the least. The ashes were light; and, on pressing between the fingers, vanished, leaving behind a gross stinking moisture with which the floor was smeared; the walls and furniture of the room being covered with a moist cineritious soot, which had not only stained the linen in the chests, but had penetrated into the closet, as well as into the room overhead, the walls of which were moistened with

the same viscous humour.—We have various other relations of persons burnt to death in this unaccountable manner.

Sig. Mondini, Bianchini, and Maffei, have written treatises express to account for the cause of so extraordinary an event: common fire it could not be, since this would likewise have burnt the bed and the room; besides that it would have required many hours, and a vast quantity of fuel, to reduce a human body to ashes; and, after all, a considerable part of the bones would have remained entire, as they were anciently found after the fiercest funeral fires. Some attribute the effect to a mine of sulphur under the house; others, to a miracle; while others suspect that art or villany had a hand in it. A philosopher of Verona maintains, that such a conflagration might have arisen from the inflammable matters wherewith the human body naturally abounds. Sig. Bianchini accounts for the conflagration of the lady above mentioned, from her using a bath or lotion of camphorated spirit of wine when she found herself out of order. Maffei supposes it owing to lightning, but to lightning generated in her own body, agreeable to his doctrine, which is, That lightning does not proceed from the clouds, but is always produced in the place where it is seen and its effects perceived. We have had a late attempt to establish the opinion, that these destroying internal fires are caused in the entrails of the body by inflamed effluvia of the blood; by juices and fermentation in the stomach; by the many combustible matters which abound in living bodies for the purposes of life; and, finally, by the fiery evaporations which exhale from the settlings of spirit of wine, brandies, and other hot liquors, in the tunica villosa of the stomach and other adipose or fat membranes; within which those spirits engender a kind of camphor, which in the night-time, in sleep, by a full respiration, are put in a stronger motion, and are more apt to be set on fire. Others ascribe the cause of such persons being set on fire to lightning; and their burning so entirely, to the greater quantity of phosphorus and other combustible matter they contained.—For our own part, we can by no means pretend to explain the cause of such a phenomenon: but for the interests of humanity we wish it could be derived from something external to the human body; for if, to the calamities of human life already known, we superadd a suspicion that we may unexpectedly and without the least warning be consumed by an *internal* fire, the thought is too dreadful to be borne.

BURNING, or *Brenning*, in our old customs, denotes an infectious disease, got in the stews by conversing with lewd women, and supposed to be the same with what we now call the *venereal disease*.

In a manuscript of the vocation of John Bale to the bishopric of Ossory, written by himself, he speaks of Dr Hugh Weston, who was dean of Windsor in 1556, but deprived by cardinal Pole for adultery, thus: "At this day is lecherous Weston, who is more practised in the arts of breech-burning, than all the whores of the stews. He not long ago brent a beggar of St Botolph's parish. See STEWS.

BURNING, in antiquity, a way of disposing of the dead much practised by the ancient Greeks and Romans, and still retained by several nations in the East and West Indies. The antiquity of this custom

Burning. rises as high as the Theban war, where we are told of the great solemnity accompanying this ceremony at the pyre of Menæacus and Archemorus, who were contemporary with Jair the eighth judge of Israel. Homer abounds with funeral obsequies of this nature. In the inward regions of Asia the practice was of very ancient date, and the continuance long: for we are told, that, in the reign of Julian, the king of Chionia burnt his son's body, and deposited the ashes in a silver urn. Coeval almost with the first instances of this kind in the east, was the practice in the western parts of the world. The Herulians, the Getes, and the Thracians, had all along observed it; and its antiquity was as great with the Celtæ, Sarmatians, and other neighbouring nations. The origin of this custom seems to have been out of friendship to the deceased: their ashes were preserved as we preserve a lock of hair, a ring, or a seal, which had been the property of a deceased friend.

Kings were burnt in cloth made of the asbestos stone, that their ashes might be preserved pure from any mixture with the fuel and other matters thrown on the funeral pile. The same method is still observed with the princes of Tartary. Among the Greeks, the body was placed on the top of a pile, on which were thrown divers animals, and even slaves and captives, besides unguents and perfumes. In the funeral of Patroclus we find a number of sheep and oxen thrown in, then four horses, followed by two dogs, and lastly by 12 Trojan prisoners. The like is mentioned by Virgil in the funerals of his Trojans; where, besides oxen, swine, and all manner of cattle, we find eight youths condemned to the flames. The first thing was the fat of the beasts wherewith the body was covered, that it might consume the sooner; it being reckoned great felicity to be quickly reduced to ashes. For the like reason, where numbers were to be burnt at the same time, care was taken to mix with the rest some of humid constitutions, and therefore more easily to be inflamed. Thus we are assured by Plutarch and Macrobius, that for every ten men it was customary to put in one woman. Soldiers usually had their arms burnt with them. The garments worn by the living were also thrown on the pile, with other ornaments and presents; a piece of extravagance which the Athenians carried to so great a height, that some of the law-givers were forced to restrain them, by severe penalties, from defrauding the living by their liberality to the dead.—In some cases, burning was expressly forbid among the Romans, and even looked upon as the highest impiety. Thus infants, who died before the breeding of teeth, were intombed unburnt in the ground, in a particular place set apart for this purpose, called *suggrundarium*. The like was practised with regard to those who had been struck dead with lightning, who were never to be burnt again. Some say that burning was denied to suicides.—The manner of burning among the Romans was not unlike that of the Greeks: the corpse, being brought out without the city, was carried directly to the place appointed for burning it; which, if it joined to the sepulchre, was called *buſtum*; if separate from it, *ustrina*; and there laid on the *rogus* or *pyra*, a pile of wood prepared on which to burn it, built in shape of an altar, but of different height according to the quality of the deceased. The wood used was commonly from such trees as contain most pitch or rosin; and if any other were used,

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they split it for the more easy catching fire: round the pile they set cypress trees, probably to hinder the noisome smell of the corpse. The body was not placed on the bare pile, but on the couch or bed whereon it lay. This done, the next of blood performed the ceremony of lighting the pile; which they did with a torch, turning their faces all the while the other way, as if it were done with reluctance. During the ceremony, decursions and games were celebrated; after which came the *offilegium*, or gathering of the bones and ashes; also washing and anointing them, and repositing them in urns.

BURNING, among surgeons, denotes the application of an actual cautery, that is, a red-hot iron instrument, to the part affected: otherwise denominated *cauterization*.—The whole art of physic among the Japanese lies in the choice of places proper to be burnt; which are varied according to the disease. In the country of the Mogul, the colic is cured by an iron ring applied red-hot about the patient's navel. Certain it is, that some very extraordinary cures have been performed accidentally by burning. The following case is recorded in the Memoirs of the academy of sciences by M. Homberg. A woman of about 35 became subject to a head-ach, which at times was so violent, that it drove her out of her senses, making her sometimes stupid and foolish, at other times raving and furious. The seat of the pain was in the forehead, and over the eyes, which were inflamed, and looked violently red and sparkling; and the most violent fits of it were attended with nausea and vomitings. In the times of the fits, she could take no food; but, out of them, had a very good stomach. Mr Homberg had in vain attempted her cure for three years with all kinds of medicines: only opium succeeded; and that but little, all its effect being only the taking off the pain for a few hours. The redness of her eyes was always the sign of an approaching fit. One night, feeling a fit coming on, she went to lie down upon the bed; but first walked up to the glass with the candle in her hand, to see how her eyes looked: in observing this, the candle set fire to her cap: and as she was alone, her head was terribly burnt before the fire could be extinguished. Mr Homberg was sent for, and ordered bleeding and proper dressings: but it was perceived, that the expected fit this night never came on; the pain of the burning wore off by degrees; and the patient found herself from that hour cured of the head-ach, which had never returned in four years after, which was the time when the account was communicated.—Another case, not less remarkable than the former, was communicated to Mr Homberg by a physician at Bruges. A woman, who for several years had her legs and thighs swelled in an extraordinary manner, found some relief from rubbing them before the fire with brandy every morning and evening. One evening the fire chanced to catch the brandy she had rubbed herself with, and slightly burnt her. She applied some brandy to her burn; and in the night all the water her legs and thighs were swelled with was entirely discharged by urine, and the swelling did not again return.

BURNING-Bush. See BUSH.

BURNING-Glass, a convex glass commonly spherical, which being exposed directly to the sun, collects all the rays falling thereon into a very small space called the *focus*;

5 G

cus;

Burning. *ut*; where wood or any other combustible matter being put, will be set on fire. The term *burning-glass* is also used to denote those concave mirrors, whether composed of glass quick-silvered, or of metalline matters, which burn by reflection, condensing the sun's rays into a focus similar to the former.

The use of burning-glasses appears to have been very ancient. Diodorus Siculus, Lucian, Dion, Zonaras, Galen, Anthemius, Eustathius, Tzetzes, and others, attest, that by means of them Archimedes set fire to the Roman fleet at the siege of Syracuse. Tzetzes is so particular in his account of this matter, that his description suggested to Kercher the method by which it was probably accomplished. That author says, that "Archimedes set fire to Marcellus's navy, by means of a burning-glass composed of small square mirrors, moving every way upon hinges; which, when placed in the sun's rays, directed them upon the Roman fleet, so as to reduce it to ashes at the distance of a bow-shot." A very particular testimony we have also from Anthemius of Lydia, who takes pains to prove the possibility of setting fire to a fleet, or any other combustible body, at such a distance.

That the ancients were also acquainted with the use of catoptric or refracting burning-glasses, appears from a passage in Aristophanes's comedy of the clouds, which clearly treats of their effects. The author introduces Socrates as examining Strepsiades about the method he had discovered of getting clear of his debts. He replies, that "he thought of making use of a burning-glass which he had hitherto used in kindling his fire;" "for (says he) should they bring a writ against me, I'll immediately place my glass in the sun at some little distance from it, and set it on fire." Pliny and Lactantius have also spoken of glasses that burn by refraction. The former calls them *balls or globes of glass or crystal*, which, exposed to the sun, transmit a heat sufficient to set fire to cloth, or corrode the dead flesh of those patients who stand in need of caustics; and the latter, after Clemens Alexandrinus, takes notice that fire may be kindled by interposing glasses filled with water between the sun and the object, so as to transmit the rays to it.

It seems difficult to conceive how they should know such glasses would burn without knowing they would magnify, which it is granted they did not, till towards the close of the 13th century, when spectacles were first thought on. For as to those passages in Plautus which seem to intimate the knowledge of spectacles, M. de la Hire observes, they do not prove any such thing; and he solves this, by observing, that their burning-glasses being spheres, either solid or full of water, their foci would be one-fourth of their diameter distant from them. If then their diameter were supposed half a foot, which is the most we can allow, an object must be at an inch and a half distance to perceive it magnified; those at greater distances do not appear greater, but only more confused through the glass than out of it. It is no wonder, therefore, the magnifying property of convex glasses was unknown, and the burning one known. It is more wonderful there should be 300 years between the invention of spectacles and telescopes.

Among the ancients, the burning mirrors of Archimedes and Proclus are famous: the former we have already taken notice of; by the other, the navy of Vi-

tellius besieging Byzantium, according to Zonaras, was burnt to ashes.

Among the moderns, the most remarkable burning mirrors are those of Settala, of Villette, of Tschirnhausen, of Buffon, of Trudaine, and of Parker.

Settala, canon of Padua, made a parabolic mirror, which, according to Schottus, burnt pieces of wood at the distance of 15 or 16 paces. The following things are noted of it in the *Acta Eruditorum*. 1. Green wood takes fire instantaneously, so as a strong wind cannot extinguish it. 2. Water boils immediately; and eggs in it are presently edible. 3. A mixture of tin and lead, three inches thick, drops presently; and iron and steel plate becomes red-hot presently, and a little after burns into holes. 4. Things not capable of melting, as stones, bricks, &c. become soon red-hot, like iron. 5. Slate becomes first white, then a black glass. 6. Tiles are converted into a yellow glass, and shells into a blackish yellow one. 7. A pumice stone, emitted from a volcano, melts into white glass; and, 8. A piece of crucible also vitrifies in eight minutes. 9. Bones are soon turned into an opaque glass, and earth into a black one. The breadth of this mirror is near three Leipsic ells, its focus two ells from it; it is made of copper, and its substance is not above double the thickness of the back of a knife.

Villette, a French artist of Lyons, made a large mirror, which was bought by Tavernier, and presented to the king of Persia; a second, bought by the king of Denmark; a third, presented by the French king to the royal academy; a fourth has been in England, where it was publicly exposed. The effects hereof, as found by Dr Harris and Dr Defaguliers, are, that a silver sixpence is melted in 7" and $\frac{1}{2}$, a king George's halfpenny in 16", and runs with a hole in 34". Tin melts in 3", cast iron in 16", slate in 3"; a fossil shell calcines in 7"; a piece of Pompey's pillar at Alexandria vitrifies the black part in 50", in the white in 54"; copper ore in 8"; bone calcines in 4", vitrifies in 33". An emerald melts into a substance like a torquois stone; a diamond weighing four grains loses $\frac{1}{8}$ of its weight: the asbestos vitrifies; as all other bodies will do, if kept long enough in the focus; but when once vitrified, the mirror can go no farther with them. This mirror is 47 inches wide, and is ground to a sphere of 76 inches radius; so that its focus is about 38 inches from the vertex. Its substance is a composition of tin, copper, and tin-glass.

Every lens, whether convex, plano-convex, or convexo-convex, collects the sun's rays, dispersed over its convexity, into a point by refraction; and is therefore a burning-glass. The most considerable of this kind is that made by M. de Tschirnhausen: the diameters of his lenses are three and four feet, the focus at the distance of 12 feet, and its diameter an inch and a half. To make the focus the more vivid, it is collected a second time by a second lens parallel to the first, and placed in that point where the diameter of the cone of rays formed by the first lens is equal to the diameter of the second; so that it receives them all; and the focus, from an inch and a half, is contracted into the space of eight lines, and its force increased proportionably.

This glass vitrifies tiles, slates, pumice-stones, &c. in a moment. It melts sulphur, pitch, and all resins, under

Burning. under water; the ashes of vegetables, woods, and other matters, are transmuted into glass; and every thing applied to its focus is either melted, turned into a calx, or into smoke. Tschirnhausen observes, that it succeeds best when the matter applied is laid on a hard charcoal well burnt.

Sir Isaac Newton presented a burning-glass to the royal society, consisting of seven concave glasses, so placed, as that all their foci join in one physical point. Each glass is about 11 inches and a half in diameter: six of them are placed round the seventh, to which they are all contiguous; and they form a kind of segment of a sphere, whose subtense is about 34 inches and a half, and the central glass lies about an inch farther in than the rest. The common focus is about 22 inches and a half distant, and about an inch in diameter. This glass vitrifies brick or tile in 1", and melts gold in 30".

It would appear, however, that glass quicksilvered is a more proper material for burning-glasses than metals; for the effects of that speculum wherewith Mr Macquer melted the platina, seem to have been superior to those above mentioned, though the mirror itself was much smaller. The diameter of this glass was only 22 inches, and its focal distance 28. Black flint, when exposed to the focus, being powdered to prevent its crackling and flying about, and secured in a large piece of charcoal, bubbled up and ran into transparent glass in less than half a minute. Hessian crucibles, and glass-house pots, vitrified completely in three or four seconds. Forged iron smoked, boiled, and changed into a vitrescent scoria as soon as it was exposed to the focus. The gypsum of Montmartre, when the flat sides of the plates or leaves of which it is composed were presented to the glass, did not show the least disposition to melt; but, on presenting a transverse section of it, or the edges of the plates, it melted in an instant, with a hissing noise, into a brownish yellow matter. Calcareous stones did not completely melt: but there was detached from them a circle more compact than the rest of the mass, and of the size of the focus; the separation of which seemed to be occasioned by the shrinking of the matter which had begun to enter into fusion. The white calx of antimony, commonly called *diaphoretic antimony*, melted better than the calcareous stones, and changed into an opaque pretty glossy substance like white enamel. It was observed, that the whiteness of the calcareous stones and the antimonial calx was of great disadvantage to their fusion, by reason of their reflecting great part of the sun's rays; so that the subject could not undergo the full activity of the heat thrown upon it by the burning-glass. The case was the same with metallic bodies, which melted so much the more difficultly as they were more white and polished; and this difference was so remarkable, that in the focus of this mirror, so fusible a metal as silver, when its surface was polished, did not melt at all.

Plate CIX. fig. 3. represents M. Buffon's burning mirror, which he with great reason supposes to be of the same nature with that of Archimedes. It consists of a number of small mirrors of glass quicksilvered, all of which are held together by an iron frame. Each of these small mirrors is also moveable by a contrivance on the back part of the frame, that so their reflections

may all coincide in one point. By this means they are capable of being accommodated to various heights of the sun, and to different distances. The adjusting them in this manner takes up a considerable time; but after they are so adjusted, the focus will continue unaltered for an hour or more.

Fig. 4, represents a contrivance of M. Buffon's for diminishing the thickness of very large refracting lenses. He observes, that in large lenses of this kind, and which are most convenient for many purposes, the thickness of the glass in the middle is so great, as very much to diminish their force. For this reason he proposes to form a burning-glass of concentric circular pieces of glass, each resting upon the other, as represented in the figure. His method is to divide the convex arch of the lens into three equal parts. Thus, suppose the diameter to be 26 inches, and the thickness in the middle to be three inches: By dividing the lens into three concentric circles, and laying the one over the other, the thickness of the middle piece needs be only one inch; at the same time that the lens will have the same convexity, and almost the same focal distance, as in the other case; while the effects of it must be much greater, on account of the greater thinness of the glass.

M. Trudaine, a French gentleman, constructed a burning lens on a new principle. It was composed of two circular segments of glass spears, each four feet in diameter, applied with their concave sides towards each other. The cavity was filled with spirit of wine, of which it contained 40 pints. It was presented by the maker to the royal academy of sciences, but was, not long after, broken by accident. The expence of constructing it amounted to about 1000 l. sterling. After all, it does not appear that the effects of this lens were very great. Mr Magellan informs us, that it could only coagulate the particles of platina in 20 minutes, while Mr Parker's lens entirely melted them in less than two.

A large burning lens, indeed, for the purpose of fusing and vitrifying such substances as resist the fires of ordinary furnaces, and especially for the application of heat in vacuo, and in other circumstances in which heat cannot be applied by any other means, has long been a desideratum among persons concerned in philosophical experiments: And it appears now to be in a great degree accomplished by Mr Parker. His lens is three feet in diameter, made of flint glass, and which, when fixed in its frame, exposes a surface two feet eight inches and a half in the clear.

In the *Elevation* represented on the plate, A is the lens of the diameter mentioned: thickness in the centre, 3 inches and one fourth: weight, 212 pounds: length of the focus, 6 feet 8 inches; diameter of ditto, 1 inch. B, a second lens, whose diameter in the frame is 16 inches, and shows in the clear 13 inches: thickness in the centre, 1 inch five-eighths: weight 21 pounds: length of focus 29 inches: diameter of ditto, three-eighths of an inch. When the two above lenses are compounded together, the length of the focus is 5 feet 3 inches: diameter of ditto, half an inch. C, a truncated cone, composed of 21 ribs of wood: at the larger end is fixed the great lens A, at the smaller extremity the lesser lens B: near the smaller end is also fixed a rack, D, passing through the pillar L, moveable by a pinion turning in the said pillar, by

Burning. means of the handle E, and thus giving a vertical motion to the machine. F, a bar of wood, fixed between the two lower ribs of the cone at G; having, within a chaced mortice in which it moves, an apparatus H, with the iron plate, I, fixed thereto; and this part turning on a ball and socket, K, a method is thereby obtained of placing the matter under experiment, so as to be acted upon by the focal rays in the most direct and powerful manner. L L, a strong mahogany frame, moving on castors, MM. Immediately under the table N are three friction wheels, by which the machine moves horizontally. O, a strong iron bow, in which the lens and the cone hang.

Section. a, The great lens marked A in the elevation. b, The frame which contains the lens. c, The small lens marked B. d, The frame which contains the small lens. e, The truncated cone, marked C. f, The bar on which the apparatus marked F moves. g, The iron plate marked I. h, The cone of rays formed by the refraction of the great lens a, and falling on the lens c. i, The cone of rays formed by the refraction of the lens c. *Front view.* k, The great lens. l, The frame containing it. m, The strong iron bow in which it hangs.

From a great number of experiments made with this lens, in the presence of many scientific persons, the following are selected as specimens of its powers.

Substances fused, with their weight and time of fusion.	Weight in Grains.	Time in Seconds.
Gold, pure, - - - - -	20	4
Silver, do. - - - - -	20	3
Copper, do. - - - - -	33	20
Platina, do. - - - - -	10	3
Nickell, - - - - -	16	3
Bar iron, a cube, - - - - -	10	12
Cast iron, a cube, - - - - -	10	3
Steel, a cube, - - - - -	10	12
Scoria of wrought iron, - - - - -	12	2
Kearsh, - - - - -	10	3
Cauk, or terra ponderosa, - - - - -	10	7
A topaz, or chrysolite, - - - - -	3	45
An oriental emerald, - - - - -	2	25
Crystal pebble, - - - - -	7	6
White agate, - - - - -	10	30
Flint oriental, - - - - -	10	30
Rough cornelian, - - - - -	10	75
Jasper, - - - - -	10	25
Onyx, - - - - -	10	20
Garnet, - - - - -	10	17
White Rhomboidal spar, - - - - -	10	60
Zeolites, - - - - -	10	23
Rotten stone, - - - - -	10	80
Common slate, - - - - -	10	2
Asbestos, - - - - -	10	10
Common lime-stone, - - - - -	10	55
Pumice stone, - - - - -	10	24
Lava, - - - - -	10	7
Volcanic clay, - - - - -	10	60
Cornish moor-stone, - - - - -	10	60

BURNING Mountains. See *ÆTNA*, *ETNA*, *HECLA*, *VESUVIUS*, and *VOLCANO*, with the plates accompanying them.

BURNING-Springs. Of these there are many in different parts of the world; particularly one in Dauphiny near Grenoble; another near Hermanstadt in Transylvania; a third at Chermay, a village near Switzerland; a fourth in the canton of Friburg; and a fifth not far from the city of Cracow in Poland. There also is, or was, a famous spring of the same kind at Wigan in Lancashire, which, upon the approach of a lighted candle, would take fire and burn like spirit of wine for a whole day. But the most remarkable one of this kind, or at least that of which we have the most particular description, was discovered in 1711 at Brosely in Shropshire. The following account of this remarkable spring was given by the reverend Mr Mason Woodwardin professor at Cambridge, dated February 18th 1746. "The well for four or five feet deep is six or seven feet wide; within that is another less hole of like depth dug in the clay, in the bottom whereof is placed a cylindric earthen vessel, of about four or five inches diameter at the mouth, having the bottom taken off, and the sides well fixed in the clay rammed close about it. Within the pot is a brown water, thick as puddle, continually forced up with a violent motion beyond that of boiling water, and a rumbling hollow noise, rising or falling by fits five or six inches; but there was no appearance of any vapour rising, which perhaps might have been visible, had not the sun shone so bright. Upon putting a candle down at the end of a stick, at about a quarter of a yard distance, it took fire, darting and flashing after a very violent manner for about half a yard high, much in the manner of spirits in a lamp, but with great agitation. It was said, that a tea-kettle had been made to boil in about nine minutes time, and that it had been left burning for 48 hours without any sensible diminution. It was extinguished by putting a wet mop upon it; which must be kept there for a little time, otherwise it would not go out. Upon the removal of the mop there arises a sulphureous smoke lasting about a minute, and yet the water is very cold to the touch." In 1755, this well totally disappeared by the sinking of a coal-pit in its neighbourhood.

The cause of the inflammable property of such waters, is with great probability supposed to be their mixture with petroleum, which is one of the most inflammable substances in nature, and has the property of burning on the surface of water.

BURNING of Colours, among painters. There are several colours that require burning; as,

First, Lamp-black, which is a colour of so greasy a nature, that, except it is burnt, it will require a long time to dry. The method of burning, or rather drying, lamp-black, is as follows: Put it into a crucible over a clear fire, letting it remain till it be red hot, or so near it that there is no manner of smoke arises from it.

Secondly, Umber, which if it be intended for colour for a horse, or to be a shadow for gold, then burning fits it for both these purposes. In order to burn umber, you must put it into the naked fire, in large lumps, and not take it out till it is thoroughly red hot; if you have a mind to be more curious, put it into a crucible, and keep it over the fire till it be red hot.

Ivory also must be burnt to make black, thus: fill two

Fig. 1. *Blatta Americana*.
The Cockroach.



Fig. 2.
Bruchus.

Pisi.



Fig. 6 *Bradypus didactylus*.
two toed Sloth.



Fig. 5. Burroughss Machine.

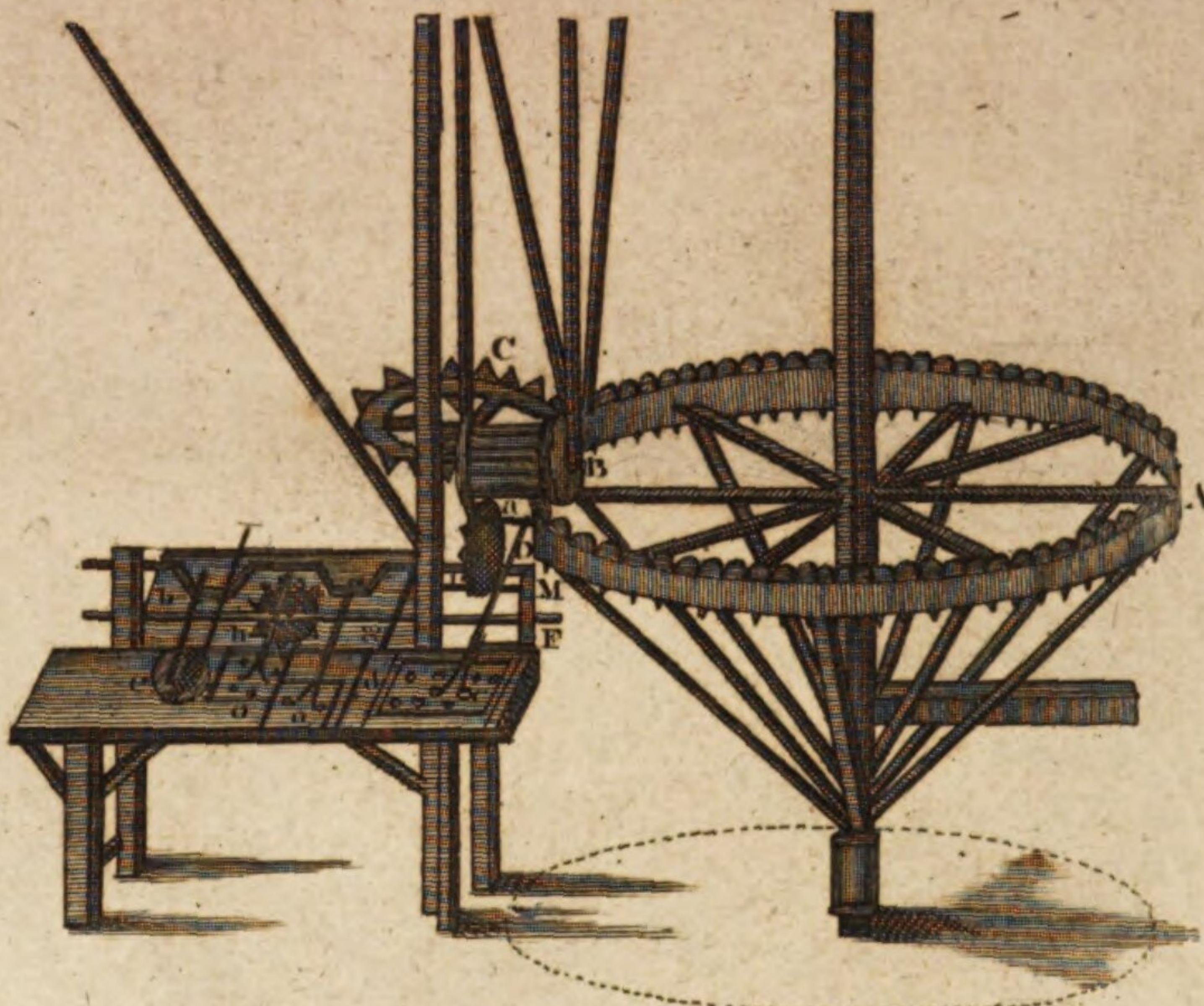


Fig. 7.

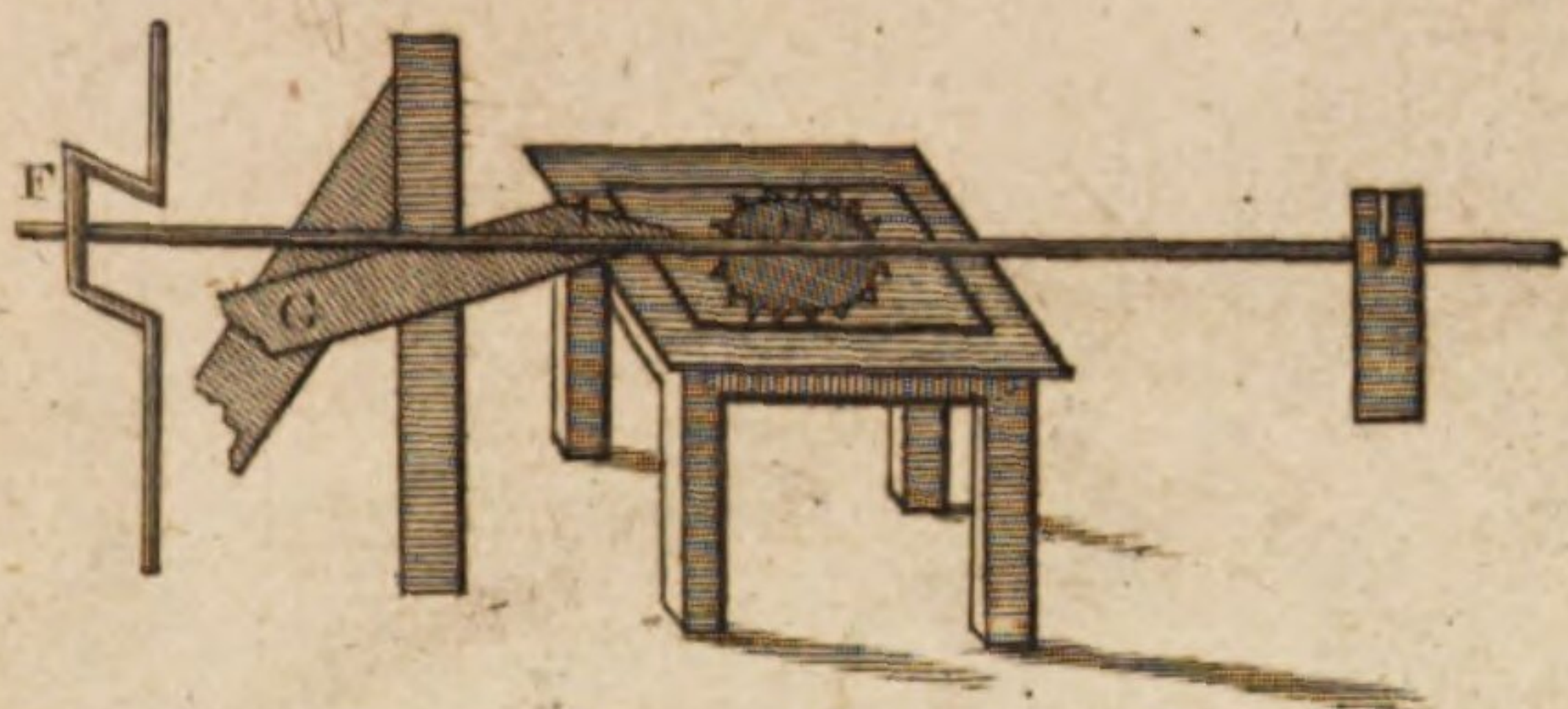


Fig. 4. Burning Mirror
with elevations.

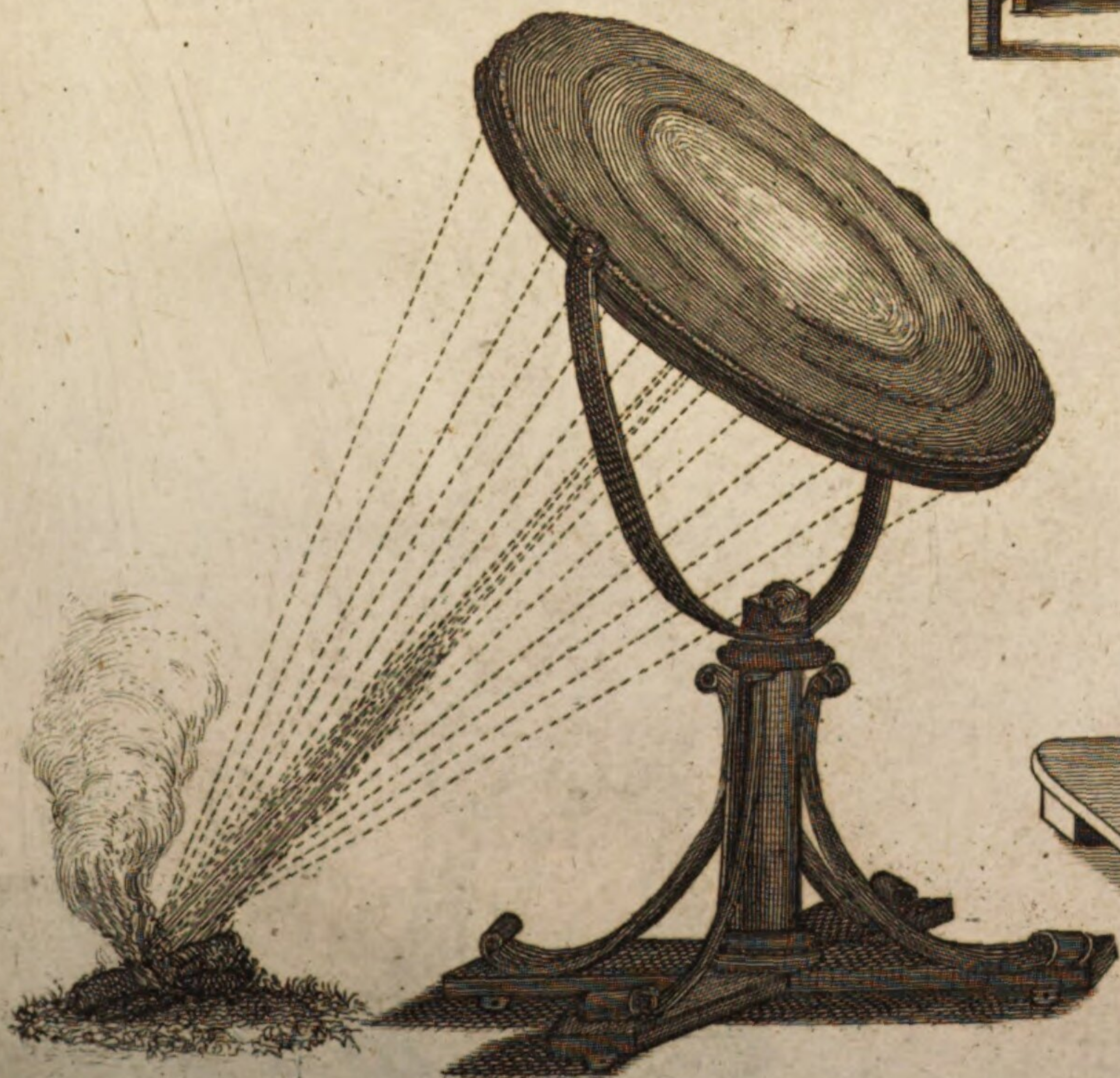
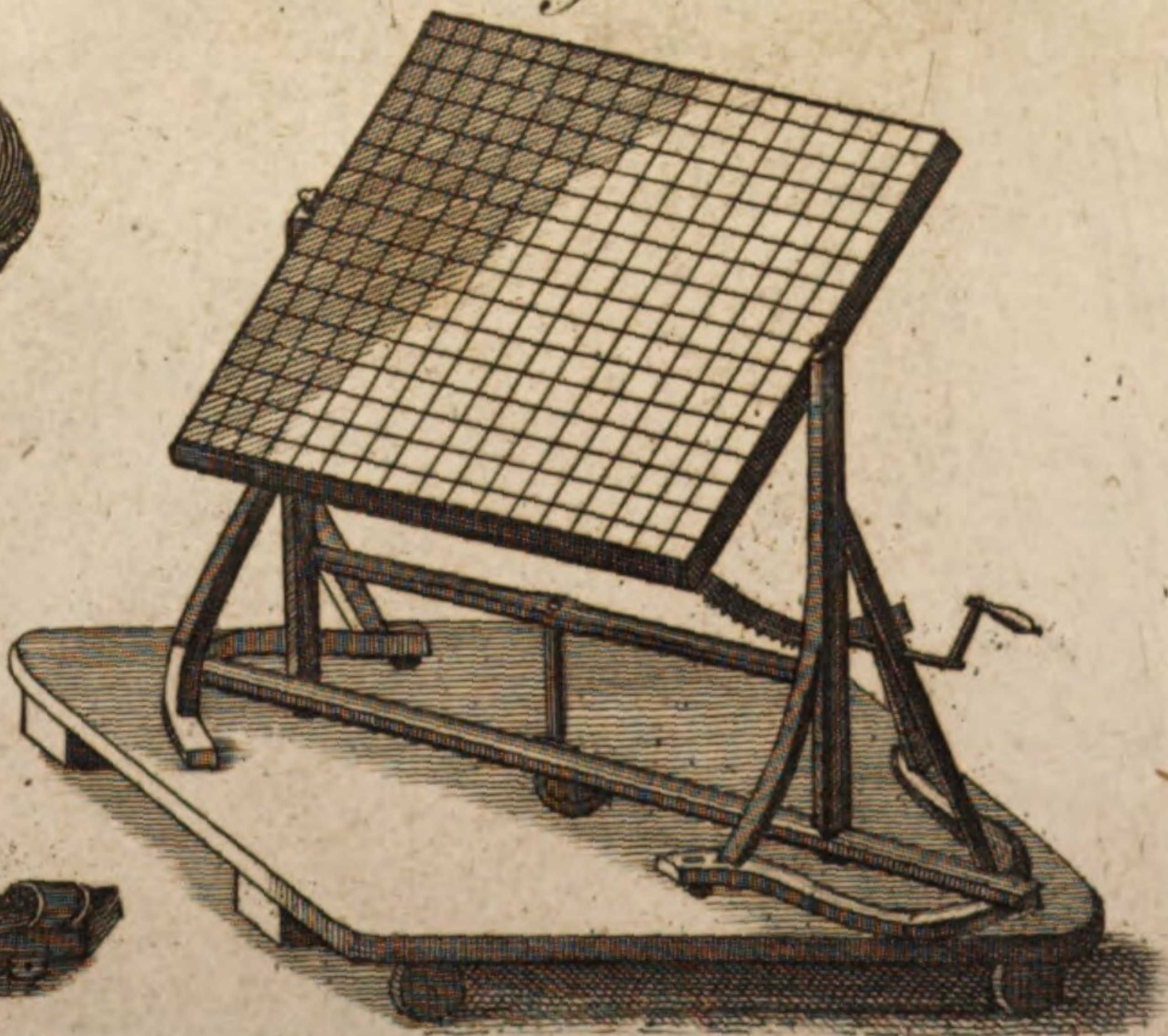
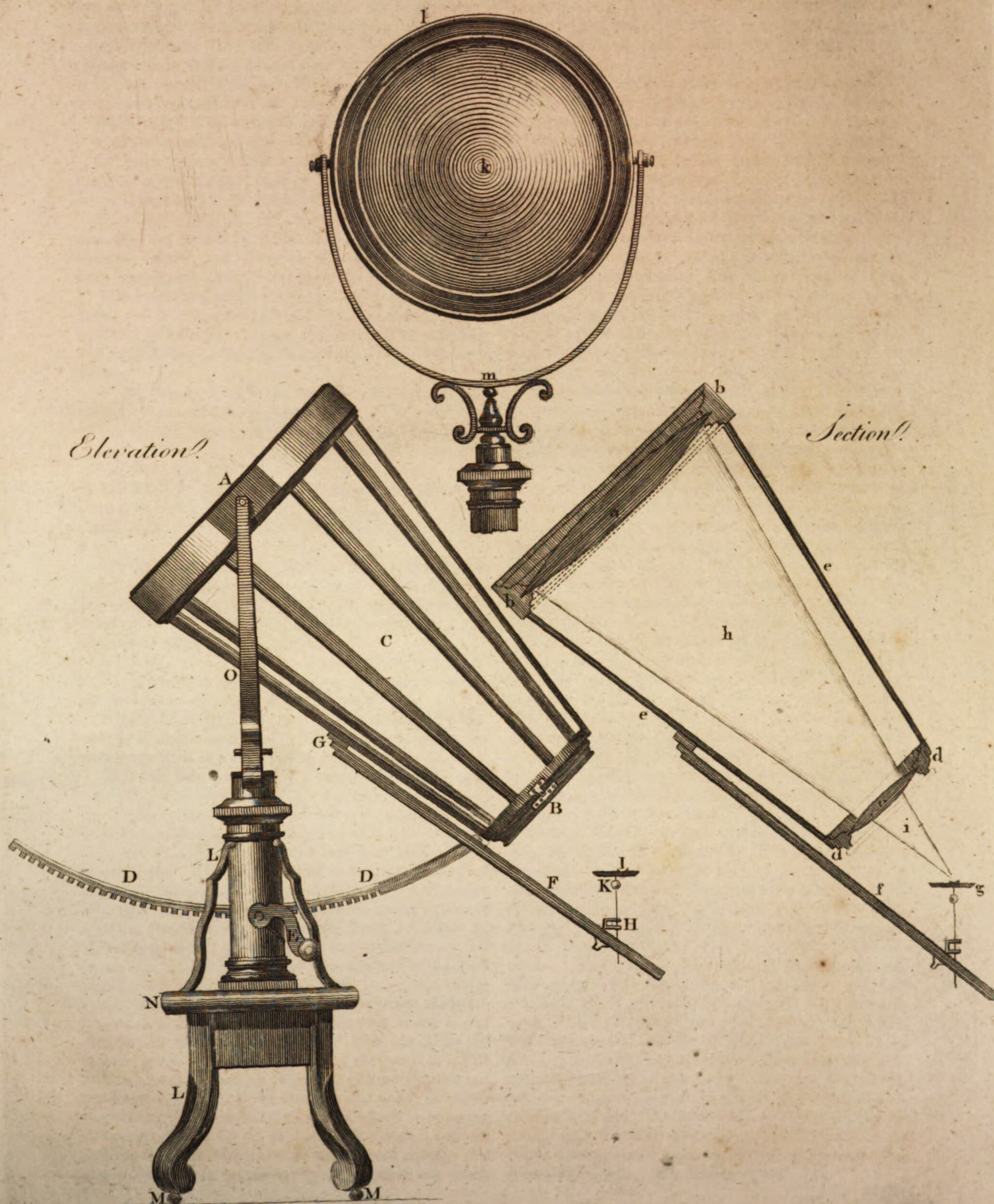


Fig. 3. Burning Mirror
of Archimedes.



Burning Lens.
Parker's.

Plate CX.



A. Bell Prin. Natl. Sculptor first.

Burnisher two crucibles with shavings of ivory, then clap their two mouths together, and bind them fast with an iron wire, and lute the joints close with clay, salt, and horse-dung, well beaten together; then set it over the fire, covering it all over with coals; let it remain in the fire till you are sure that the matter inclosed is thoroughly red-hot: then take it out of the fire; but do not open the crucibles till they are perfectly cold; for were they opened while hot, the matter would turn to ashes; and so it will be if the joints are not luted close.

BURNISHER, a round polished piece of steel, serving to smooth and give a lustre to metals.

Of these there are different kinds of different figures, straight, crooked, &c. Half burnishers are used to solder silver, as well as to give a lustre.

Burnishers for gold and silver are commonly made of a dog's or wolf's tooth, set in the end of an iron or wooden handle. Of late, agates and pebbles have been introduced, which many prefer to the dog's tooth.

The burnishers used by engravers in copper, usually serve with one end to burnish and with the other to scrape.

BURNISHING, the art of smoothing or polishing a metalline body, by a brisk rubbing of it with a burnisher.

Book-binders burnish the edges of their books, by rubbing them with a dog's tooth.

BURNLEY, a town of Lancashire in England, situated in W. Long. 2. 5. N. Lat. 51. 38.

BURNTISLAND. See **BRUNTISLAND**.

BURNTWOOD, a town of Essex in England, situated on a hill, in E. Long. 0. 25. N. Lat. 51. 38.

BURR, the round knob of a horn next a deer's head.

BURRE, **BOUREE**, or *Boree*, a kind of dance composed of three steps joined together in two motions, begun with a crotchet rising. The first couplet contains twice four measures, the second twice eight. It consists of a balance and couplee.

BURR-PUMP, or *BILGE-Pump*. See **BILGE**.

BURROCK, a small wier, or dam, where wheels are laid in a river, for the taking of fish.

BURROUGHS'S MACHINE, invented by Mr Burroughs of Southwark, and for which the society for the encouragement of arts gave him a premium of L. 70.

This machine consists of a cog-wheel A (fig. 5.), 12 feet in diameter, carrying 72 cogs; which turn a trundle-head B, one foot four inches in diameter, and furnished with eight rounds; and also an horizontal spur-wheel C, of 12 cogs, and one foot eight inches in diameter. The trundle-head B turns a spur-wheel D of ten cogs, and two feet eight inches in diameter. This spur-wheel has two cranks, *a* *b*, in its shaft; one of which *a* gives motion to a wooden frame *c*, about 34 inches long and 19 broad. On the under side of this frame are fastened by screws twelve pieces of polished metal, each five inches and a half long, and three broad, covered with leather; and underneath these polishers, a glass plate cemented in another frame is placed on the bench *d*, and polished with tripoli by the motion given to the upper frame by the crank *a*. The nuts of the screws which fasten the polishers to the upper frame are not screwed close to the wood, in order to give the frame room to play; by which contrivance the perpendicular rise of the crank is avoided, and the motion of the polishers always parallel and equal. The under frame may be moved by the hand in any direc-

tion without stopping the machine; by which means the plate, when larger than the polishing frame can cover in its motion, will be equally polished in every part.

The other crank *b* gives motion to two other polishers marked *n*, *o*, which have an alternate motion by the bending of the crank; they move upon the same plate, and have an equal number of polishers as that already described.

The same crank also gives motion to a contrivance represented at *e* for polishing spectacle-glasses. It consists of two segments of the same sphere; one concave and the other convex. On the latter the glasses are cemented; and polished by the former, which is moved by the crank *b*. The convex segment may be moved round by the hand without stopping the machine, so that all the glasses on its superficies will be equally polished.

The other spur-wheel C, by means of a crank in its shaft, gives motion to another frame *g*, employed in grinding the glass-plates. The rod *h*, extended from the crank *f* to the frame *g*, is fastened to the latter by means of a pivot, in order to admit of a rotatory motion, as well as that given it by the crank in a longitudinal direction. This rotatory motion is effected by means of a rod of iron *i*, called a *trigger*, sharp at the extremity next the frame, where it touches the teeth of an horizontal spur-wheel, or circular piece of wood, fixed on the grinding-plate, while the other end is extended three feet two inches to the centre of motion.

But this contrivance, in which the merit of the machine principally consists, will be much better conceived from a small delineation of it by itself (fig. 6.), where F is the crank marked *f* in fig. 5. and turned by the spur-wheel C in the same figure. G is the trigger, three feet two inches long. I, a roll fixed on the trigger for the rod to slide on. H, the horizontal spur-wheel, eleven inches in diameter, fixed on the grinding-plate; the teeth of which is touched by the trigger; but with a very unequal force, as it will wholly depend upon the grinding-plate's being farther from, or nearer to, the centre of motion of the trigger. By this simple contrivance, the grinding-plate has a very compound motion, never moving exactly in the same tract, and therefore must grind the plates equally in every part. Several attempts have been made by others for producing the same effect: but without success; the grinding-plate always follows the same tract, and consequently the plates were ground unequally.

BURROW (Sir James), master of the crown office, was elected F. R. S. and F. A. S. 1751. On the death of Mr West in 1772, he was prevailed on to fill the president's chair at the royal society till the anniversary election, when he resigned it to Sir John Pringle; and August 10. 1773, when the society presented an address to his majesty, he received the honour of knighthood. He published two volumes of Reports in 1766; two others in 1771 and 1776; and a volume of Decisions of the Court of King's Bench upon settlement cases from 1732 to 1772 (to which was subjoined An Essay of Punctuation); in three parts, 4to, 1768, 1772, 1776. The essay was also printed separately in 4to, 1773. He published, without his name, "A few Anecdotes and Observations relating to Oliver Cromwell and his family, serving to rectify several errors concerning him," published by Nicol. Comn. Papadopolis, in his *Historia Gymnasii Patavini*, 1763, 4to. He died in 1782.

Bur-
roughs's
Burrow.

Burrow
||
Burse.

BURROWS, holes in a warren, serving as a covert for rabbits, &c. A coney's coming out of her burrow is called *bolting*. To catch coney, they sometimes lay purse-nets over the burrows, then put in a terrier close muzzled, which making the creature bolt, she is caught in the net.

BURROWSTOUNNESS, or **BORROWSTOUNNESS**, a sea-port town of West Lothian, situated on the Forth, 18 miles west from Edinburgh. It is a small town, and continually enveloped in smoke from the numerous salt-works and coaleries that are near it; but is a place of considerable trade, and has a very commodious harbour. The town-house is built in form of a castle, and stands behind a great reservoir used for cleansing the harbour when it is much choaked with mud and sand.—Next to Leith, Borrowstounness was the principal trading town on the Forth before the canal was finished between it and the Clyde; and it is still much frequented by shipping: its exports in salt and coals are very great, and it has also several vessels employed in the Greenland fishery.

BURSA, or **PRUSA**, in geography, the capital of Bithinia in Asia Minor, situated in a fine fruitful plain, at the foot of mount Olympus, about 100 miles south of Constantinople. E. Long. 29. 0. N. Lat. 40. 30.

BURSA Pastoris, in botany. See **THLASPI**.

BURSA, *Burse*, originally signifies a purse. In middle-age writers it is more particularly used for a little college or hall in an university, for the residence of students, called *burfales* or *burfarii*. In the French universities it still denotes a foundation for the maintenance of poor scholars in their studies. The nomination to burfes is in the hands of the patrons and founders thereof. The burfes of colleges are not benefices, but mere places assigned to certain countries and persons. A burse becomes vacant by the burfer's being promoted to a cure.

BURSÆ MUCOSÆ. See **ANATOMY**, n° 8.

BURSAR, or **BURSER**, (*Bursarius*), is used in middle age writers for a treasurer or cash-keeper. In this sense we meet with burfars of colleges. Conventual burfars were officers in monasteries, who were to deliver up their account yearly on the day after Michaelmas. The word is formed from the Latin *burfa*, whence also the English word *purse*; hence also the officer, who in a college is called *burfar*, in a ship is called *purfer*.

BURSARS, or *Bursors*, (*Bursarii*), also denote those to whom stipends are paid out of a burse or fund appointed for that purpose.

BURSARIA, the burfary, or exchequer of collegiate and conventual bodies; or the place of receiving, paying, and accounting by the burfarii or burfers.

BURSE, in matters of commerce, denotes a public edifice in certain cities, for the meeting of merchants to negotiate bills, and confer on other matters relating to money and trade. In this sense, burse amounts to the same with what we otherwise call an *exchange*.

The first place of this kind to which the name *Burse* was given, Guiechardin assures us was at Bruges; and it took its denomination from an hotel adjoining to it, built by a lord of the family de la Bourse, whose arms, which are three purses, are still found on the crowning over the portal of the house. Cattel's account is somewhat different, viz. that the merchants of Bruges

bought a house or apartment to meet in, at which was the sign of the purse. From this city the name was afterwards transferred to the like places in others, as in Antwerp, Amsterdam, Bergen in Norway, and London. This last, anciently known by the name of the *common burse of merchants*, had the denomination since given it by queen Elizabeth, of the *royal exchange*. The most considerable burse is that of Amsterdam, which is a large building 230 feet long and 130 broad, round which runs a peristyle 20 feet wide. The columns of the peristyle, which are 46, are numbered, for the conveniency of finding people. It will hold 4500 persons.

In the times of the Romans there were public places for the meeting of merchants in most of the trading cities of the empire; that built at Rome, in the 259th year after its foundation, under the consulate of Appius Claudius and Publius Servilius, was denominated the *college of merchants*; some remains of it are still to be seen, and are known by the modern Romans under the name *loggia*. The Hans towns, after the example of the Romans, gave the name of *colleges* to their burfes.

BURSER, in botany; a genus of the monogynia order, belonging to the hexandria class of plants. The calyx is triphyllous; the corolla tripetalous; the capsule carnos, trivalved, and monospermous. There is but one species, the *gummifera*, or gum elemi. This is frequent in woods in most of the Bahama islands, and grows speedily to a great height and thickness. The bark is brown, and very like the birch of Britain. The wood is soft and useless, except when pieces of the limbs are put into the ground as fences, when it grows readily, and becomes a durable barrier. The leaves are pinnate, the middle rib five or six inches long, with the pinnæ set opposite to one another on footstalks half an inch long. It has yellow flowers, male and female on different trees. These are succeeded by purple-coloured berries bigger than large peas, hanging in clusters on a stalk of about five inches long, to which each berry is joined by a footstalk of half an inch long. The seed is hard, white, and of a triangular figure, inclosed within a thin capsule, which divides in three parts, and discharges the seed. The fruit, when cut, discharges a clear balsam or turpentine, esteemed a good vulnerary, particularly for horses. On wounding the bark, a thick milky liquor is obtained, which soon concretes into a resin no way different from the *gum elemi* of the shops (see **AMYRIS**). Dr Browne, and after him Linnæus, have, according to Dr Wright, mistaken the bark of the roots for the *simarouba*, which is a species of **QUASSIA**. Plate CX.

BURTON upon **TRENT**, a town of Staffordshire, in England. It had formerly a large abbey; and over the river Trent it has now a famous bridge of free stone, about a quarter of a mile in length, supported by 37 arches. It consists chiefly of one long street, which runs from the place where the abbey stood to the bridge; and has a good market for corn and provisions. Burton ale is reckoned the best of any brought to London. E. Long. 1. 36. N. Lat. 52. 48.

BURTON, a town of Lincolnshire in England, seated on a hill near the river Trent. It is but a small place, and situated in W. Long. 0. 30. N. Lat. 53. 40.

BURTON, a town of Westmoreland in England, seated

Burfer
||
Burton.

Burton. ed in a valley near a large hill called *Farleton-knot-hill*. It is pretty well built, and lies on the great road from Lancaster to Carlisle. W. Long. 2. 35. N. Lat. 54. 10.

BURTON (Robert), known to the learned by the name of *Democritus junior*, was younger brother to William Burton who wrote "The antiquities of Leicestershire;" and born of an ancient family at Lindley, in that county, upon the 8th of February 1576. He was educated in grammatical learning in the free school of Sutton Colefield in Warwickshire; in the year 1593 was sent to Brazen-nose college in Oxford; and in 1599 was elected student of Christ-church. In 1616, he had the vicarage of St Thomas, in the west suburb of Oxford, conferred upon him by the dean and canons of Christ-church, to the parishioners of which, it is said, that he always gave the sacrament in wafers; and this, with the rectory of Segrave in Leicestershire, given him some time after by George lord Berkeley, he held to the day of his death, which happened in January 1639.

He was a man of general learning; a great philosopher; an exact mathematician; and (what makes the peculiarity of his character) a very curious calculator of nativities. He was extremely studious, and of a melancholy turn; yet an agreeable companion, and very humorous. *The anatomy of melancholy*, by *Democritus junior*, as he calls himself, shows, that these different qualities were mixed together in his composition. This book was printed first in 4to, afterwards in folio, in 1624, 1632, 1638, and 1652, to the great emolument of the bookseller, who, as Mr Wood tells us, got an estate by it. Some circumstances attending his death occasioned strange suspicions. He died in his chamber at or very near the time which, it seems, he had some years before predicted from the calculation of his nativity; and this exactness made it whispered about, that for the glory of astrology, and rather than his calculation should fail, he became indeed a *felo de se*. This, however, was generally discredited; he was buried with due solemnity in the cathedral of Christ-church, and had a fair monument erected to his memory. He left behind him a very choice collection of books. He bequeathed many to the Bodleian library; and 100 l. to Christ-church, the interest of which was to be laid out yearly in books for their library.

BURTON (John), D. D. a late worthy and learned divine, was born in 1696, at Wembworth, in Devonshire, his father being rector of that parish; and was educated at Corpus Christi college, Oxford. In 1725, being then pro-proctor and master of the schools, he spoke a Latin oration before the determining bachelor, which is entitled "*Heli*;" or, An instance of a magistrate's erring through unseasonable lenity;" written and published with a view to encourage the salutary exercise of academical discipline; and afterwards treated the same subject still more fully in four Latin sermons before the university, and published them with appendices. He also introduced into the schools, Locke, and other eminent modern philosophers, as suitable companions to Aristotle; and printed a double series of philosophical questions, for the use of the younger students; from which Mr Johnson of Magdalene college, Cambridge, took the hint of his larger work of the same kind, which has gone through several editions.

When the settling of Georgia was in agitation, Dr Bray, justly revered for his institution of parochial libraries, Dr Stephen Hales, Dr Berriman, and other learned divines, intreated Mr Burton's pious assistance in that undertaking. This he readily gave, by preaching before the society in 1732, and publishing his sermon, with an appendix on the state of that colony; and he afterwards published an account of the designs of the associates of the late Dr Bray, with an account of their proceedings.

About the same time, on the death of Dr Edward Littleton, he was presented by Eton college to the vicarage of Maple-Derham, in Oxfordshire. Here a melancholy scene, which too often appears in the mansions of the clergy, presented itself to his view; a widow, with three infant daughters, without a home, without a fortune: from his compassion arose love, the consequence of which was marriage; for Mrs Littleton was handsome, elegant, accomplished, ingenious, and had great sweetness of temper. In 1760, he exchanged his vicarage of Maple-Derham for the rectory of Worplesdon in Surry. In his advanced age, finding his eyes begin to fail him, he collected and published, in one volume, all his scattered pieces, under the title of *Opuscula miscellanea*; and soon after died, February 11th, 1771.

BURTON, in the sea-language, a small tackle consisting of two single blocks, and may be made fast anywhere at pleasure, for hoisting small things in and out.

BURY, is sometimes used to denote the hole or den of some animal under ground. In this sense we say the *bury* of a mole, a tortoise, or the like. The grillo-talpa, or mole-cricket, digs itself a bury with its forefeet, which are made broad and strong for that purpose. Naturalists speak of a kind of urchins in the island of Maraguan, which have two entries to their buries, one towards the north, the other to the south, which they open and shut alternately as the wind happens to lie.

BURY, in geography, a market town of Lancashire, about 30 miles south-east of Lancaster. It is a barony in the family of Albemarle. W. Long. 2. 20. N. Lat. 53. 36.

BURY (St Edmund's), or *St Edmund's bury*, the county town of Suffolk, about 12 miles east of Newmarket, and 70 north-east of London. E. Long. 0. 45. N. Lat. 52. 20.

BURYING, the same with interment or BURIAL.

BURYING Alive was the punishment of a vestal who had violated her vow of virginity. The unhappy priestess was let down into a deep pit, with bread, water, milk, oil, a lamp burning, and a bed to lie on. But this was only for shew; for the moment she was let down, they began to cast in the earth upon her till the pit was filled up*. Some middle-age writers seem to make *See the burying alive (defossio)* the punishment of a woman article thief. Lord Bacon gives instances of the resurrection *Vestals* of persons who have been buried alive. The famous Duns Scotus is of the number; who, having been seized with a catalepsia, was thought dead, and laid to sleep among his fathers, but raised again by his servant in whose absence he had been buried. Bartholin gives an account of a woman, who, on recovering from an apoplexy, could not be convinced but that she was dead, and solicited so long and so earnestly to be buried,

Burton
||
Burying.

Burying
||
Busby.

ried, that they were forced to comply; and performed the ceremonies, at least in appearance. The famous emperor Charles V. after his abdication, took it into his head to have his burial celebrated in his lifetime, and assisted at it. See CHARLES V.

BURRING-Place. The ancients buried out of cities and towns; an usage which we find equally among Jews, Greeks, and Romans. Among the last, burying within the walls was expressly prohibited by a law of the 12 tables. The usual places of interment were in the suburbs and fields, but especially by the waysides. We have instances, however, of persons buried in the city; but it was a favour allowed only to a few of singular merit in the commonwealth. Plutarch says, those who had triumphed were indulged in it. Be this as it will, Val. Publicola, and C. Fabricius, are said to have had tombs in the forum; and Cicero adds Tubertus to the number. Lycurgus allowed his Lacedemonians to bury their dead within the city and around their temples, that the youth, being inured to such spectacles, might be the less terrified with the apprehension of death. Two reasons are alleged why the ancients buried out of cities: the first, an opinion, that the sight, touch, or even neighbourhood, of a corpse defiled a man, especially a priest; whence that rule in A. Gellius, that the *flamen Dialis* might not on any account enter a place where there was a grave: the second, to prevent the air from being corrupted by the stench of putrified bodies, and the buildings from being endangered by the frequency of funeral fires.

Burying in churches was not allowed for the first 300 years after Christ; and the same was severely prohibited by the Christian emperors for many ages afterwards. The first step towards it appears to have been the practice of erecting churches over the graves of some martyrs in the country, and translating the relics of others into churches in the city: the next was, allowing kings and emperors to be buried in the atrium or church porch. In the 6th century, the people began to be admitted into the church-yards; and some princes, founders, and bishops, into the church. From that time the matter seems to have been left to the discretion of the bishop.

BUSBEC (Auger Gissen, lord of), a person illustrious on account of his embassies, was born at Commines in the year 1522; and educated at the most famous universities, at Louvain, at Paris, at Venice, at Bologna, and at Padua. He was engaged in several important employments and negotiations, and particularly was twice sent ambassador by the king of the Romans to the emperor Soliman. He collected inscriptions; bought manuscripts; searched after rare plants; enquired into the nature of animals; and, in his second journey to Constantinople, carried with him a painter, that he might be able to communicate to the curious, the figures, at least, of the plants and animals that were not well known in the west. He wrote a Discourse of the state of the Ottoman empire, and a Relation of his two journeys to Turkey, which are much esteemed. He died in 1592.

BUSBY (Dr Richard), son of a gentleman in Westminster, was born at Lutton in Lincolnshire, in 1606. He passed through the classes in Westminster school, as king's scholar; and completed his studies at

Christ-church, Oxford. In 1640, he was appointed master of Westminster school; and by his skill and diligence in the discharge of this important and laborious office, for the space of 55 years, bred up the greatest number of eminent men in church and state, than ever at one time adorned any age or nation. He was extremely severe in his school; though he applauded wit in his scholars, even when it reflected on himself. This great man, after a long and healthy life purchased by temperance, died in 1695, aged 89; and was buried in Westminster abbey, where there is a fine monument erected for him, with a Latin inscription. He composed several books for the use of his school.

BUSH (Paul), the first bishop of Bristol, became a student in the university of Oxford about the year 1513, and in 1518 took the degree of bachelor of arts. He afterwards became a brother of the order called *bonhoms*; of which, after studying some time among the friars of St Austin (now Wadham college), he was elected provincial. In that station he lived many years; till at length king Henry VIII. being informed of his great knowledge in divinity and physic, made him his chaplain, and in 1542 appointed him to the new episcopal see of Bristol: but having in the reign of Edward VI. taken a wife, he was, on the accession of Mary, deprived of his dignity, and spent the remainder of his life in a private station at Bristol, where he died in the year 1558, aged 68, and was buried on the north side of the choir of the cathedral. Wood says, that while he was a student at Oxford, he was numbered among the celebrated poets of that university; and Pits gives him the character of a faithful catholic, his want of chastity notwithstanding. He wrote, 1. An exhortation to Margaret Burges, wife to John Burges, clothier of King's-wood, in the county of Wilts. Lond. printed in the reign of Edward VI. 8vo. 2. Notes on the Psalms. 3. Treatise in praise of the cross. 4. Answer to certain queries concerning the abuses of the mass. Records, N^o 25. 5. Dialogues between Christ and the Virgin Mary. 6. Treatise of salves and curing remedies. 7. A little treatise in English, called *The extirpation of ignorancy*, &c. in verse, Lond. by Pinson, 4to. 8. *Carmina diversa*.

BUSH, a term used for several shrubs of the same kind growing close together: thus we say, a *furze-bush*, *bramble-bush*, &c.

BUSH is sometimes used, in a more general sense, for any assemblage of thick branches interwoven and mixed together.

BUSH also denotes a coronated frame of wood hung out as a sign at taverns. It takes the denomination from hence, that, anciently, signs where wine was sold were *bushes* chiefly of ivy, cypress, or the like plant, which keeps its verdure long. And hence the English proverb, "Good wine needs no *bush*."

Burning-Bush, that bush wherein the Lord appeared to Moses at the foot of mount Horeb, as he was feeding his father-in-law's flocks.

As to the person that appeared in the bush, the text says, "That the angel of the Lord appeared unto him in a flame of fire, out of the middle of the bush;" but whether it was a created angel, speaking in the person of God, or God himself, or (as the most received opinion is) Christ the son of God, has been matter of

some

Buphaga Africana,
African Beef-eater.



Buceros.
Pied Hornbill.



Byrrhus.



Bucco,
The Bull-faced Parrot.

Bursera Gummifera.



Bursera
Gummifera.

Bush,
Bushel.

some controversy among the learned. Those who suppose it no more than an angel seem to imply that it would be a diminution of the majesty of God, to appear upon every occasion, especially when he has such a number of celestial ministers, who may do the business as well. But considering that God is present every where, the notification of his presence by some outward sign in one determinate place (which is all we mean by his appearance), is in our conception less laborious (if any thing laborious could be conceived of God) than a delegation of angels upon every turn from heaven, and seems in the main to illustrate rather than debase the glory of his nature and existence. But however this be, it is plain that the angel here spoken of was no created being, from the whole context, and especially from his saying, "I am the Lord God, the Jehovah," &c. since this is not the language of angels, who are always known to express themselves in such humble terms as these, "I am sent from God; I am thy fellow-servant," &c. It is a vain pretext to say, that an angel, as God's ambassador, may speak in God's name and person; for what ambassador of any prince ever yet said, "I am the king?" Since therefore no angel, without the guilt of blasphemy, could assume these titles; and since neither God the Father, nor the Holy Ghost, are ever called by the name of *angel*, i. e. "messenger, or person sent," whereas God the Son is called by the prophet Malachi (chap. iii. 1.), "The angel of the covenant;" it hence seems to follow, that this angel of the Lord was God the Son, who might very properly be called an *angel*, because in the fulness of time he was sent into the world in our flesh, as a messenger from God, and might therefore make these his temporary apparitions, presages, and forerunners, as it were, of his more solemn mission. The emblem of the burning-bush is used as the seal of the church of Scotland, with this motto: i. e. "Thou burning, is never consumed."

BUSHEL, a measure of capacity for things dry; as grains, pulse, dry fruits, &c. containing four pecks, or eight gallons, or one-eighth of a quarter.

Du Cange derives the word from *bussellus*, *bustellus*, or *bissellus*, a diminutive of *buz*, or *buzza*, used in the corrupt Latin for the same thing; others derive it from *bussulus*, an *urn*, wherein lots were cast; which seems to be a corruption from *buxulus*. *Bussellus* appears to have been first used for a liquid measure of wine, equal to eight gallons. *Octo libræ faciunt galonem vini, & octo galones vini faciunt bussellum London, quæ est octava pars quarterii*. It was soon after transferred to the dry measure of corn of the same quantity — *Pondus octo librarum frumenti facit bussellum, de quibus octo consistit quarterium*.

By 12 Hen. VII. cap. 5. a bushel is to contain eight gallons of wheat; the gallon eight pounds of wheat troy-weight; the pound twelve ounces troy-weight; the ounce twenty shillings; and the sterling thirty-two grains, or corn of wheat, growing in the midst of the ear. This standard bushel is kept in the Exchequer; when being filled with common spring water, and the water measured before the house of commons in 1696, in a regular parallelopiped, it was found to contain 2145,6 solid inches; and the said water being weighed, amounted to 1131 ounces and 14 penny weights troy. Besides the standard or legal

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bushel, we have several local bushels, of different dimensions in different places. At Abingdon and Andover, a bushel contains nine gallons; at Appleby and Penrith, a bushel of pease, rye, and wheat, contains 16 gallons; of barley, big, malt, mixt malt, and oats, 20 gallons. A bushel contains, at Carlisle, 24 gallons; at Chester, a bushel of wheat, rye, &c. contains 32 gallons, and of oats 40; at Dorchester, a bushel of malt and oats contains 10 gallons; at Falmouth, the bushel of stricken coals is 16 gallons, of other things 20, and usually 21 gallons; at Kingston upon Thames, the bushel contains eight and a half; at Newbury 9; at Wycomb and Reading, eight and three-fourths; at Stamford 16 gallons. Houghton. Collect. tom. i. n. 46. p. 42.

At Paris, the bushel is divided into two half bushels; the half bushel into two quarts; the quart into two half quarts; the half quart into two litrons; and the litron into two half litrons. By a sentence of the provost of the merchants of Paris, the bushel is to be eight inches two lines and an half high, and ten inches in diameter; the quart four inches nine lines high, and six inches nine lines wide; the half quart four inches three lines high, and five inches diameter; the litron three inches and an half high, and three inches ten lines in diameter. Three bushels make a minot, six a mine, twelve a septier, and an hundred and forty-four a muid. In other parts of France the bushel varies: fourteen one-eighth bushels of Amboise and Tours make the Paris septier. Twenty bushels of Avignon make three Paris septiers. Twenty bushels of Blois make one Paris septier. Two bushels of Bourdeaux make one Paris septier. Thirty-two bushels of Rochel make nineteen Paris septiers. Oats are measured in a double proportion to other grains; so that twenty-four bushels of oats make a septier, and 248 a muid. The bushel of oats is divided into four picotins, the picotin into two half quarts, or four litrons. For salt four bushels make one minot, and six a septier. For coals eight bushels make one minot, sixteen a mine, and 320 a muid. For lime, three bushels make a minot, and forty-eight minots a muid. See MEASURE and WEIGHT.

BUSIRIS, (anc. geog.); a city of the Lower Egypt, to the south of Leontopolis, on that branch of the Nile called Busiriticus: Built by Busiris, noted for his cruelty, and slain by Hercules, (Ovid, Virgil, Diodorus Siculus). Strabo denies such a tyrant ever existed; Isocrates has written his panegyric. In this city there stood a grand temple of Isis, which gave it the appellation of the city of Isis. It was destroyed on a revolt by Dioclesian.

BUSIRITICUS FLUVIUS, (anc. geog.), that branch of the Nile which empties itself at the mouth called Ostium Pathmeticum, or Phatniticum, (Ptolemy); also a part, according to an ancient map, at the Ostium Mindefium; this river, or branch, dividing itself at Diospolis into two branches: called Busiriticus, from the city of Busiris, which stood on its left, or west branch. It is the second branch of the Nile, reckoning from the east.

BUSIRITICUS NOMOS, (anc. geog.), a prefecture, or division of the Lower Egypt; so called from the city Busiris, (Herodotus, Pliny, Ptolemy.)

BUSITIS, (anc. geog.), a district of Arabia Deserta;

Bushel
Bustis.

Buskin
||
Busta

ferta; so called from Bus, or Buz, Nahor's second son; the country of Elihu, the fourth interlocutor in Job; called *Buzites*, by the Septuagint.

BUSKIN, a kind of shoe, somewhat in manner of a boot, and adapted to either foot, and worn by either sex. This part of dress, covering both the foot and mid-leg, was tied underneath the knee; it was very rich and fine, and principally used on the stage by actors in tragedy. It was of a quadrangular form; and the sole was so thick, as that, by means thereof, men of the ordinary stature might be raised to the pitch and elevation of the heroes they personated. The colour was generally purple on the stage; herein it was distinguished from the sock worn in comedy, that being only a low common shoe. The buskin seems to have been worn not only by actors but by girls, to raise their height; travellers and hunters also made use of it, to defend themselves from the mire. In classic authors, we frequently find the buskin used to signify tragedy itself, in regard it was a mark of tragedy on the stage. It was also to be understood for a lofty strain or high style.

BUSS, in maritime affairs, a small sea-vessel, used by us and the Dutch in the herring fishery, commonly from 48 to 60 tons burden, and sometimes more: a buss has two small sheds or cabins, one at the prow and the other at the stern; that at the prow serves for a kitchen. Every buss has a master, an assistant, a mate, and seamen in proportion to the vessel's bigness; the master commands in chief, and without his express orders the nets cannot be cast nor taken up; the assistant has the command after him; and the mate next, whose business is to see the seamen manage their rigging in a proper manner, to mind those who draw in their nets, and those who kill, gut, and cure the herrings, as they are taken out of the sea: the seamen do generally engage for a whole voyage in the lump. The provision which they take on board the busses, consist commonly in bisket, oat-meal, and dried or salt fish; the crew being content for the rest with what fresh fish they catch. See **FISHERIES**.

BUST, or **BUSTO**, in sculpture, denotes the figure or portrait of a person in relievo, showing only the head, shoulders, and stomach, the arms being lopped off; ordinarily placed on a pedestal or console.

In speaking of an antique, we see the head is marble, and the bust porphyry, or bronze, that is, the stomach and shoulders. Felibien observes, that though in painting, one may say a figure appears in busto, yet it is not properly called a *bust*, that word being confined to things in relievo.

The bust is the same with what the Latins called *Herma*, from the Greek *Hermes*, Mercury, the image of that god being frequently represented in this manner among the Athenians.

BUST is also used, especially by the Italians, for the trunk of an human body, from the neck to the hips.

BUSTA Gallica, was a place in ancient Rome, wherein the bones of the Gauls, who first took the city, and were slain by Camillus, were deposited. It differed from

BUSTA Gallorum, a place on the Apennines, thus called by reason of many thousand of Gauls killed there by Fabius.

BUSTARD, in ornithology. See **OTIS**.

BUSTUARIÆ МОЕЧНÆ, according to some, women that were hired to accompany the funeral and lament the loss of the deceased: but others are of opinion, that they were rather the more common prostitutes, that stood among the tombs, graves, and other such lonely places.

BUSTUARI, in Roman antiquity, gladiators who fought about the bustum or funeral pile of a person of distinction, that the blood which was spilt might serve as a sacrifice to the infernal gods, and render them more propitious to the manes of the deceased. This custom was introduced in the room of the more inhuman one of sacrificing captives at the bustum, or on the tombs of warriors.

BUSTUM, in antiquity, denotes a pyramid or pile of wood, whereon were anciently placed the bodies of the deceased, in order to be burnt.

The Romans borrowed the custom of burning their dead from the Greeks. The deceased, crowned with flowers, and dressed in his richest habits, was laid on the bustum. Some authors say, it was only called *bustum*, after the burning, *quasi bene ustum*: before the burning it was more properly called *pyra*; during it, *rogus*: and afterwards, *bustum*. When the body was only burnt there, and buried elsewhere, the place was not properly called *bustum*, but *ustrina*, or *ustrinum*.

BUSTUM, in the Campus Martius, was a structure whereon the emperor Augustus first, and after him the bodies of his successors, were burnt. It was built of white stone, surrounded with an iron palisade, and planted within with alder trees.

BUSTUM was also figuratively applied to denote any tomb. Whence those phrases, *facere bustum*, *violare bustum*, &c.

BUSTUM of an Altar, was the hearth or place where the fire was kindled.

BUTCHER, a person who slaughters cattle for the use of the table, or who cuts up and retails the same.

Among the ancient Romans, there were three kinds of established butchers, whose office it was to furnish the city with the necessary cattle, and to take care of preparing and vending their flesh. The *suarii* provided hogs; the *pecuarii* or *boarii*, other cattle, especially oxen; and under these was a subordinate class, whose office was to kill, called *lanii*, and *carnifices*.

To exercise the office of butcher among the Jews with dexterity, was of more reputation than to understand the liberal arts and sciences. They have a book concerning shamble-constitution; and in case of any difficulty, they apply to some learned rabbi for advice: nor was any allowed to practise this art, without a licence in form; which gave the man, upon evidence of his abilities, a power to kill meat, and others to eat what he killed; provided he carefully read every week for one year, and every month the next year, and once a quarter during his life, the constitution abovementioned.

We have some very good laws for the better regulation and preventing the abuses committed by butchers. A butcher that sells swine's flesh mangled, or dead of the murrain, for the first offence shall be amerced; for the second, have the pillory; for the third, be imprisoned, and make fine; and for the fourth, abjure the town. Butchers not selling meat at reasonable prices,

Bustard
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Butcher.

Butcher shall forfeit double the value, leviable by warrant of two justices of the peace. No butcher shall kill any flesh in his scalding-house, or within the walls of London, on pain to forfeit for every ox so killed, 12d. and for every other beast, 8d. to be divided betwixt the king and the prosecutor.

BUTCHER-Bird, in ornithology. See **LANIUS**.

BUTCHER-Groom, in botany. See **RUSCUS**.

BUTCHER'S Island, in the East Indies, a small island about two miles long and scarce one broad. It has its name from cattle being kept there for the use of Bombay, from which it is about three miles distant. It has a small fort, but of very little consequence.

BUTE, an island lying to the west of Scotland, being separated from Cowal, a district of Argyleshire, only by a narrow channel. In length it is about 18 miles; the broadest part from east to west is about five. Part of it is rocky and barren; but from the middle southwards, the ground is cultivated, and produces pease, oats, and barley. Here is a quarry of red stone, which the natives have used in building a fort and chapel in the neighbourhood of Rothsay, which is a very ancient royal borough, head town of the shire of Bute and Arran; but very thinly peopled, and maintained chiefly by the herring fishery, with the profits of which all the rents of this island are chiefly paid. On the north side of Rothsay are the ruins of an ancient fort, with its draw-bridge, chapel, and barracks. Here are likewise the remains of some Danish towers. The natives are healthy and industrious, speak the Erse and the dialect of the Lowlands indifferently, and profess the Protestant religion. The island is divided into two parishes, accommodated with four churches; and belongs chiefly to the earl of Bute, who possesses an elegant seat near Rothsay. This island, with that of Arran, the greater and lesser Cumbray, and *Inch-marnoc*, form a county under the name of *Bute*. This shire and that of Caithness send a member to parliament alternately. The earl of Bute is admiral of the county, by commission from his majesty; but no way dependent on the lord high admiral of Scotland: so that if any maritime case occurs within this jurisdiction (even crimes of as high a nature as murder or piracy), his lordship, by virtue of the powers as admiral, is sufficient judge, or he may delegate his authority to any deputies. The name of this isle has by several authors, and in different periods, been very differently written; as *Bote*, *Both*, *Bothe*, *Boot*, but now generally *Bute*. Our ancient writers suppose that it derived its name from a cell erected therein by St Brendan, an Irish abbot who flourished in the 6th century, because in his language such a cell was called *Both*. It is, however, probable, that this name was of greater antiquity, since we find it denominated *Botis* by the anonymous geographer of Ravenna. It was from very early times part of the patrimony of the Stuarts: large possessions in it were granted to Sir John Stuart, son of Robert II. by his beloved mistress Elizabeth More; and it has continued in that line to the present time.

BUTEO, in ornithology, the trivial name of a species of **FALCO**.

BUTLER (Charles), a native of Wycomb in the county of Bucks, and a master of arts in Magdalen college, Oxford, published a book with this title, "The principles of music in singing and setting; with the

two-fold use thereof, ecclesiastical and civil." Quarto, London 1636. The author of this book was a person of singular learning and ingenuity, which he manifested in sundry other works enumerated by Wood in the *Athen. Oxon.* Among the rest is an English grammar, published in 1633, in which he proposes a scheme of regular orthography, and makes use of characters, some borrowed from the Saxon, and others of his own invention, so singular, that we want types to exhibit them: and of this imagined improvement he appears to have been so fond, that all his tracts are printed in like manner with his grammar; the consequence whereof has been an almost general disgust to all that he has written. His "Principles of music" is, however, a very learned, curious, and entertaining book; and, by the help of the advertisement from the printer to the reader, prefixed to it, explaining the powers of the several characters made use of by him, may be read to great advantage, and may be considered as a judicious supplement to Morley's introduction.

BUTLER (Samuel), a celebrated poet of the last century, was the son of a reputable Worcestershire farmer, and born in 1612. He passed some time at Cambridge, but was never matriculated in that university. Returning to his native country, he lived some years as clerk to a justice of peace; where he found sufficient time to apply himself to history, poetry, and painting. Being recommended to Elizabeth countess of Kent, he enjoyed in her house, not only the use of all kinds of books, but the conversation of the great Mr Selden, who often employed Butler to write letters, and translate for him. He lived also some time with Sir Samuel Luke, a gentleman of an ancient family in Bedfordshire, and a famous commander under Oliver Cromwell: and he is supposed at this time to have wrote, or at least to have planned, his celebrated *Hudibras*; and under that character to have ridiculed the knight. The poem itself furnishes this key; where, in the first canto, *Hudibras* says,

" 'Tis sung, there is a valiant mamaluke
" In foreign land yclep'd — — —
" To whom we oft have been compar'd
" For person, parts, address, and beard."

After the restoration, Mr Butler was made secretary to the earl of Carbury, lord-president of Wales, who appointed him steward of Ludlow castle, when the court was revived there. No one was a more generous friend to him than the earl of Dorset and Middlesex, to whom it was owing that the court tasted his *Hudibras*. He had promises of a good place from the earl of Clarendon, but they were never accomplished; though the king was so much pleased with the poem, as often to quote it pleasantly in conversation. It is indeed said, that Charles ordered him the sum of 3000 l.: but the sum being expressed in figures, somebody through whose hands the order passed, by cutting off a cypher, reduced it to 300 l. which, though it passed the offices without fees, proved not sufficient to pay what he then owed; so that Butler was not a shilling the better for the king's bounty. He died in 1680: and though he met with many disappointments, was never reduced to any thing like want, nor did he die in debt. Mr Granger observes, that Butler "stands without rival in burlesque poetry. His *Hudibras* (says he)

Butler,
Butlerage.

he) is, in its kind, almost as great an effort of genius, as the *Paradise Lost* itself. It abounds with uncommon learning, new rhimes, and original thoughts. Its images are truly and naturally ridiculous. There are many strokes of temporary satire, and some characters and allusions which cannot be discovered at this distance of time."

BUTLER (Joseph), late bishop of Durham, a prelate distinguished by his piety and learning, was the youngest son of Mr Thomas Butler, a reputable shopkeeper at Wantage, in Berkshire, where he was born in the year 1692. His father, who was a presbyterian, observing that he had a strong inclination to learning, after his being at a grammar-school, sent him to an academy in Gloucestershire, in order to qualify him for a dissenting minister; and while there, he wrote some remarks on Dr Clerk's first sermon at Boyle's lecture. Afterwards, resolving to conform to the established church, he studied at Oriel college, where he contracted an intimate friendship with Mr Edward Talbot, son of the bishop of Durham, and brother to the lord chancellor, who laid the foundation of his subsequent advancement. He was first appointed preacher at the Rolls, and rector of Haughton and Stanhope, two rich benefices in the bishopric of Durham. He quitted the Rolls in 1726; and published in 8vo a volume of sermons, preached at that chapel. After this he constantly resided at Stanhope, in the regular discharge of all the duties of his office, till the year 1733, when he was called to attend the lord chancellor Talbot as his chaplain, who gave him a prebend in the church of Rochester. In the year 1736, he was appointed clerk of the closet to queen Caroline, whom he attended every day, by her majesty's special command, from seven to nine in the evening. In 1738 he was appointed to the bishopric of Bristol; and not long afterwards to the deanery of St Paul's, London. He now resigned his living of Stanhope. In the year 1746, he was made clerk of the closet to the king; and in 1750, was translated to Durham. This rich preferment he enjoyed but a short time; for he died at Bath June 16th, 1752. His corpse was interred in the cathedral at Bristol; where there is a monument, with an inscription, erected to his memory. He died a bachelor. His deep learning and comprehensive mind appear sufficiently in his writings, particularly in that excellent treatise intitled, *The Analogy of religion, natural and revealed, to the constitution and course of nature*, published in 8vo, 1736.

BUTLER, the name anciently given to an officer in the court of France, being the same as the grand echanson, or great cup-bearer of the present times.

BUTLER, in the common acceptation of the word, is an officer in the houses of princes and great men, whose principal business is to look after the wine, plate, &c.

BUTLERAGE of wine, is a duty of 2s. for every ton of wine imported by merchants strangers; being a composition in lieu of the liberties and freedoms granted to them by king John and Edward I. by a charter called *charta mercatoria*.

Butlerage was originally the only custom that was payable upon the importation of wines, and was taken and received by virtue of the regal prerogative, for the proper use of the crown. But for many years past,

there having been granted by parliament subsidies to the kings of England, and the duty of butlerage not repealed, but confirmed, they have been pleased to grant the same away to some nobleman, who, by virtue of such grant, is to enjoy the full benefit and advantage thereof, and may cause the same to be collected in the same manner that the kings themselves were formerly wont to do.

BUTMENT. Butments of arches are the same with buttresses. They answer to what the Romans call *sublicas*, the French *culees* and *butees*.

BUTMENTS, or *Abutments*, of a bridge, denote the two massives at the end of a bridge, whereby the two extreme arches are sustained and joined with the shore on either side.

BUTOMUS, the *FLOWERING-RUSH*, or *Water-gladiolus*: A genus of the hexagynia order, belonging to the enneandria class of plants. There is no calyx, but it has six petals, and as many monospermous capsules. There is but one species, viz. the *umbellatus*; of which there are two varieties, the one with a white, the other with a rose-coloured, flower. Though common plants, they are very pretty, and are worth propagating in a garden where there is convenience for an artificial bog, or where there are ponds of standing water, as is many times the case. Where these conveniences are wanting, they may be planted in cisterns, which should be kept filled with water, with about a foot thickness of earth in the bottom; and into this earth the roots should be planted, or the seeds sown as soon as they are ripe.

BUTRINTO, a port-town of Epirus, or Canina, in Turkey in Europe, situated opposite to the island of Corfu, at the entrance of the gulph of Venice. E. Long. 20. 40. N. Lat. 39. 45.

BUTT is used for a vessel, or measure of wine, containing two hogsheads, or 126 gallons; otherwise called *pipe*. A butt of currans is from 15 to 2,200 weight.

BUTT, or *Butt-ends*, in the sea-language, are the fore-ends of all planks under water, as they rise, and are joined one end to another.—Butt-ends in great ships are most carefully bolted; for if any one of them should spring or give way, the lake would be very dangerous and difficult to stop.

BUTTS, the place where archers meet with their bows and arrows to shoot at a mark, which we call shooting at the *butts*: (See *ARCHERY*.)—Also *butts* are the short pieces of land in arable ridges and furrows.

BUTTER, a fat unctuous substance, prepared from milk by heating or churning.

It was late ere the Greeks appear to have had any notion of butter; their poets make no mention of it, and yet are frequently speaking of milk and cheese.

The Romans used butter no otherwise than as a medicine, never as a food.

The ancient Christians of Egypt burnt butter in their lamps instead of oil; and in the Roman churches, it was anciently allowed, during Christmas time, to burn butter instead of oil, on account of the great consumption of it otherwise.

Butter is the fat, oily, and inflammable part of the milk. This kind of oil is naturally distributed through all the substance of the milk in very small particles, which are interposed betwixt the caseous and serous parts, amongst which it is suspended by a slight adhesion, but without being dissolved. It is in the same state

Butment
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Butter.

Butter. in which oil is in emulsions: hence the same whiteness of milk and emulsions; and hence, by rest, the oily parts separate from both these liquors to the surface, and form a cream. See EMULSION.

When butter is in the state of cream, its proper oily parts are not yet sufficiently united together to form an homogeneous mass. They are still half separated by the interposition of a pretty large quantity of serous and caseous particles. The butter is completely formed by pressing out these heterogeneous parts by means of continued percussion. It then becomes an uniform soft mass.

Fresh butter which has undergone no change, has scarcely any smell; its taste is mild and agreeable, it melts with a weak heat, and none of its principles are disengaged by the heat of boiling water. These properties prove, that the oily part of butter is of the nature of the fat, fixed, and mild oils obtained from many vegetable substances by expression. See OILS.—The half fluid consistence of butter, as of most other concrete oily matters, is thought to be owing to a considerable quantity of acid united with the oily part; which acid is so well combined, that it is not perceptible while the butter is fresh and has undergone no change; but when it grows old, and undergoes some kind of fermentation, then the acid is disengaged more and more; and this is the cause that butter, like oils of the same kind, becomes rancid by age.

Butter is constantly used in food, from its agreeable taste; but to be wholesome, it must be very fresh and free from rancidity, and also not fried or burnt; otherwise its acrid and even caustic acid, being disengaged, disorders digestion, renders it difficult and painful, excites acrid empyreumatic belchings, and introduces much acrimony into the blood. Some persons have stomachs so delicate, that they are even affected with these inconveniences by fresh butter and milk. This observation is also applicable to oil, fat, chocolate, and in general to all oleaginous matters.

For the making of butter: When it has been churned, open the churn, and with both hands gather it well together, take it out of the butter-milk, and lay it into a very clean bowl, or earthen pan; and if the butter be designed to be used sweet, fill the pan with clear water, and work the butter in it to and fro, till it is brought to a firm consistence of itself, without any moisture. When this has been done, it must be scotched and sliced over with the point of a knife, every way as thick as possible, in order to fetch out the smallest hair, mote, bit of rag, strainer, or any thing that may have happened to fall into it. Then spread it thin in a bowl, and work it well together, with such a quantity of salt as you think fit, and make it up into dishes, pounds, half pounds, &c.

In the *Georgical Essays*, Vol. V. p. 209. we have the following method of making well-tasted butter from the milk of cows fed on turnips. "Let the bowels, either lead or wood, be kept constantly clean, and well scalded with boiling water before using. When the milk is brought into the dairy, to every eight quarts mix one quart of boiling water; then put up the milk into the bowels to stand for cream."

The trade in butter is very considerable. Some compute 50,000 tons annually consumed in London. It is chiefly made within 40 miles round the city. Fifty

thousand firkins are said to be sent yearly from Cambridge and Suffolk alone; each firkin containing 56 lbs. Uttoxeter in Staffordshire is a market famous for good butter, inasmuch that the London merchants have established a factory there for that article. It is bought by the pot, of a long cylindrical form, weighing 14 lb.

But no butter is esteemed equal to that which is made in the county of Essex, well known by the name of Epping butter, and which in almost every season of the year yields at London from one shilling to 14 pence per pound averdupoise. The following directions concerning the making and management of butter, including the Epping method, are extracted from the 3d volume of the Bath Society Papers.

In general it is to be observed, that the greater the quantity made from a few cows, the greater will be the farmer's profit; therefore he should never keep any but what are esteemed good milkers. A bad cow will be equally expensive in her keep, and will not perhaps (by the butter and cheese that is made from her) bring in more than from three to six pounds a-year; whereas a good one will bring from seven to ten pounds per annum: therefore it is obvious that bad cows should be parted with, and good ones purchased in their room. When such are obtained, a good servant should be employed to milk them; as through the neglect and mismanagement of servants, it frequently happens that the best cows are spoiled. No farmer should trust entirely to servants, but sometimes to see themselves that their cows are milked clean; for if any milk is suffered to remain in the udder, the cow will daily give less, till at length she will become dry before the proper time, and the next season she will scarce give milk sufficient to pay for her keep.

It sometimes happens that some of a cow's teats may be scratched or wounded so as to produce foul or corrupted milk: when this is the case, we should by no means mix it with the sweet milk, but give it to the pigs; and that which is conveyed to the dairy-house should remain in the pail till it is nearly cool, before it be strained, that is, if the weather be warm; but in frosty weather it should be immediately strained, and a small quantity of boiling water may be mixed with it, which will cause it to produce cream in abundance, and the more so if the pans or vats have a large surface.

During the hot summer-months, it is right to rise with or before the sun, that the cream may be skimmed from the milk ere the dairy becomes warm; nor should the milk at that season stand longer in the vats, &c. than 24 hours, nor be skimmed in the evening till after sun-set. In winter milk may remain unskimmed for 36 or 48 hours; the cream should be deposited in a deep pan, which should be kept during the summer in the coolest part of the dairy; or in a cool cellar where a free air is admitted, which is still better. Where people have not an opportunity of churning every other day, they should shift the cream daily into clean pans, which will keep it cool, but they should never fail to churn at least twice in the week in hot weather; and this work should be done in a morning before the sun appears, taking care to fix the churn where there is a free draught of air. If a pump-churn be to be used, it may be plunged a foot deep into a tub of cold water, and should remain there during the whole

Butter. whole time of churning, which will very much harden the butter. A strong rancid flavour will be given to butter, if we churn so near the fire as to heat the wood in the winter season.

After the butter is churned, it should be immediately washed in many different waters till it is perfectly cleansed from the milk; but here it must be remarked, that a warm hand will soften it, and make it appear greasy, so that it will be impossible to obtain the best price for it. The cheesemongers use two pieces of wood for their butter; and if those who have a very hot hand were to have such, they might work the butter so as to make it more saleable.

The Epping butter is made up for market in long rolls, weighing a pound each; in the county of Somerset, they dish it in half pounds for sale; but if they forget to rub salt round the inside of the dish, it will be difficult to work it so as to make it appear handsome.

Butter will require and endure more working in winter than in summer; but it is remarked, that no person whose hand is warm by nature makes good butter.

Those who use a pump-churn must endeavour to keep a regular stroke; nor should they admit any person to assist them, except they keep nearly the same stroke: for if they churn more slowly, the butter will in the winter *go back*, as it is called; and if the stroke be more quick and violent in the summer, it will cause a fermentation, by which means the butter will imbibe a very disagreeable flavour.

Where people keep many cows, a barrel-churn is to be preferred; but if this be not kept very clean, the bad effects will be discovered in the butter; nor must we forget to shift the situation of the churn when we use it, as the seasons alter, so as to fix it in a warm place in winter, and where there is a free air in summer.

In many parts of this kingdom they colour their butter in winter, but this adds nothing to its goodness; and it rarely happens that the farmers in or near Epping use any colour, but when they do, it is very innocent. They procure some sound carrots, whose juice they express through a sieve, and mix with the cream when it enters the churn, which makes it appear like May butter; nor do they at any time use much salt, though a little is absolutely necessary.

As they make in that country but very little cheese, so of course very little whey-butter is made; nor indeed should any person make it, except for present use, as it will not keep good more than two days; and the whey will turn to better account to fatten pigs with. Nothing feeds these faster, nor will any thing make them so delicately white. At the same time it is to be observed, that no good bacon can be made from pigs thus fattened; where much butter is made, good cheese for servants may be obtained from skimmed milk, and the whey will afterwards do for store pigs.

The foregoing rules will suffice for making good butter in any country; but as some people are partial to the west-country method, it shall be described as briefly as possible.

In the first place, they deposite their milk in earthen pans in their dairy-house, and (after they have stood twelve hours in the summer, and double that space in

the winter) they remove them to stoves made for that purpose, which stoves are filled with hot embers; on these they remain till bubbles rise, and the cream changes its colour, it is then deemed heated enough, and this they call scalded cream; it is afterwards removed steadily to the dairy, where it remains twelve hours more, and is then skimmed from the milk and put into a tub or churn: if it be put into a tub, it is beat well with the hand, and thus they obtain butter; but a cleaner way is to make use of a churn. Some scald it over the fire, but then the smoke is apt to affect it; and in either case, if the pans touch the fire, they will crack or fly, and the milk and cream will be wasted.

The Cambridgeshire salt butter is held in the highest esteem, and is made nearly after the same method as the Epping; and by washing and working the salt from it the cheesemongers in London often sell it at a high price for fresh butter. They deposite it when made into wooden tubs or firkins, which they expose to the air for two or three weeks, and often wash them; but a readier way is to season them with unslaked lime, or a large quantity of salt and water well boiled will do: with this they must be scrubbed several times, and afterwards thrown into cold water, where they should remain three or four days, or till they are wanted; then they should be scrubbed as before, and well rinsed with cold water; but before they receive the butter, care must be taken to rub every part of the firkin with salt: then if the butter be properly made, and perfectly sweet, it may be gently pressed into the firkin; but it must be well salted when it is made up, and the salt should be equally distributed through the whole mass, and a good handful of salt must be spread on the top of the firkin before it is heated, after which the head should be immediately put on.

They pursue nearly the same method in Suffolk and Yorkshire; nor is the butter that is made in these counties much inferior to that made in Cambridgeshire; indeed it is often sold in London for Cambridge butter: and no people make more butter from their cows than the Yorkshire farmers do, which is certainly owing to the care they take of their cows in the winter; as at that season they house them all, feed them with good hay, and never suffer them to go out (except to water) but when the weather is very serene; and when their cows calve, they give them comfortable malt mashes for two or three days after; but these cows never answer if they are removed to other counties, except the same care and attendance be given them, and then none answer better.

Land whereon cows feed does very often affect the butter. If wild garlic, charlock, or May-weed, be found in a pasture ground, cows should not feed therein till after they have been mown, when such pernicious plants will appear no more till the following spring; but those cows that give milk must not partake of the hay made therefrom, as that will also diffuse its bad qualities.

Great part of the Epping butter is made from cows that feed during the summer months in Epping forest, where the leaves and shrubby plants contribute greatly to the flavour of the butter. The mountains of Wales, the highlands of Scotland, and the moors, commons, and heaths in England, produce excellent butter where it is properly managed; and though not equal in quantity,

Butter
Butterfly

quantity, yet far superior in quality to that which is produced from the richest meadows; and the land is often blamed when the butter is bad through mismanagement, sluttishness, or inattention.

Turnips and rape affect milk and butter, but brewers grains are sweet and wholesome food, and will make cows give abundance of milk; yet the cream thereon will be thin, except good hay be given at the same time, after every meal of grains. Coleworts and cabbages are also excellent food; and if these and favoys were cultivated for this purpose, the farmers in general would find their account in it.

Cows should never be suffered to drink improper water; stagnated pools, water wherein frogs, &c. spawn, common sewers, and ponds that receive the drainings of stables, are improper.

Divers abuses are committed in the packing and salting of butter, to increase its bulk and weight, against which we have a statute express. Pots are frequently laid with good butter for a little depth at the top, and with bad at the bottom; sometimes the butter is set in rolls, only touching at top, and standing hollow at bottom. To prevent these cheats, the factors at Utoxeter keep a surveyor, who, in case of suspicion, tries the pots with an iron instrument called a *butter-bore*, made like a cheese-taster, to be struck in obliquely to the bottom.

Shower of BUTTER. Naturalists speak of showers and dews of a butyraceous substance. In 1695, there fell in Ireland, during the winter and ensuing spring, a thick yellow dew, which had the medicinal properties of butter.

BUTTER, among chemists, a name given to several preparations, on account of their consistence resembling that of butter; as butter of antimony, &c. See CHEMISTRY-Index.

BUTTER-Bur, in botany. See TUSSILAGO.

BUTTER-Milk, the milk which remains after the butter is come by churning. Butter-milk is esteemed an excellent food, in the spring especially, and is particularly recommended in hectic fevers. Some make curds of butter-milk, by pouring into it a quantity of new milk hot.

BUTTER-Wort, in botany. See PINGUICULA.

BUTTERFLY, the English name of a numerous genus of insects. See PAPILIO.

BUTTERFLY-Shell, in natural history. See VOLUTA.

Method of preserving BUTTERFLIES. See INSECTS.

Method of making Pictures of BUTTERFLIES. "Take butterflies or field-moths, either those caught abroad, or such as are taken in caterpillars and nursed in the house till they be flies; clip off their wings very close to their bodies, and lay them on clean paper, in the form of a butterfly when flying; then have ready prepared gum arabic that hath been some time dissolved in water, and is pretty thick; if you put a drop of ox-gall into a spoonful of this, it will be better for the use; temper them well with your finger, and spread a little of it on a piece of thin white paper, big enough to take both sides of your fly; when it begins to be clammy under your finger, the paper is in proper order to take the feathers from the wings of the fly; then lay the gummed side on the wings, and it will take them up; then double your paper so as to have all the wings between the paper; then lay it on a table, press-

ing it close with your fingers; and you may rub it gently with some smooth hard thing; then open the paper and take out the wings, which will come forth transparent: the down of the upper and under side of the wings, sticking to the gummed paper, form a just likeness of both sides of the wings in their natural shapes and colours. The nicety of taking off flies depends on a just degree of moisture of the gum'd paper: for if it be too wet, all will be blotted and confused; and if too dry, your paper will stick so fast together, that it will be torn in separation. When you have opened your gum'd papers, and they are dry, you must draw the bodies from the natural ones, and paint them in water-colours: you must take paper that will bear ink very well for this use; for sinking paper will separate with the rest, and spoil all."

BUTTERIS, in the manege, an instrument of steel, fitted to a wooden handle, wherewith they pare the foot, or cut off the hoof, of a horse.

BUTTOCK of a SHIP, is that part of her which is her breadth right astern, from the tack upwards; and a ship is said to have a broad or a narrow buttock, according as she is built broad or narrow at the transum.

BUTTON, an article in dress, whose form and use are too well known to need description. They are made of various materials, as mohair, silk, horse-hair, metal, &c.

Method of making common BUTTONS. Common buttons are generally made of mohair; some indeed are made of silk, and others of thread; but the latter are of a very inferior sort. In order to make a button, the mohair must be previously wound on a bobbin; and the mould fixed to a board by means of a bodkin thrust through the hole in the middle of it. This being done, the workman wraps the mohair round the mould in three, four, or six columns, according to the button.

Horse-hair BUTTONS. The moulds of these buttons are covered with a kind of stuff composed of silk and hair; the warp being belladine silk, and the shoot horse-hair. This stuff is wove with two selvages, in the same manner and in the same loom as ribbands. It is then cut into square pieces proportional to the size of the button, wrapped round the moulds, and their selvages stitched together, which form the under part of the button.

Cleansing of BUTTONS. A button is not finished when it comes from the maker's hands; the superfluous hairs and hubs of silk must be taken off, and the button rendered glossy and beautiful before it can be sold. This is done in the following manner: A quantity of buttons are put into a kind of iron sieve, called by workmen a *singeing box*. Then a little spirit of wine being poured into a kind of shallow iron dish, and set on fire, the workman moves and shakes the singeing box, containing the buttons, briskly over the flame of the spirit, by which the superfluous hairs, hubs of silk, &c. are burnt off, without damaging the buttons. Great care, however, must be taken that the buttons in the singeing box be kept continually in motion; for if they are suffered to rest over the flame, they will immediately burn. When all these loose hairs, &c. are burnt off by the flame of the spirit, the buttons are taken out of the singeing box, and put, with a proper quantity

Butteris
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Button.

Button.

quantity of the crumbs of bread, into a leather bag, about three feet long, and of a conical shape; the mouth or smaller end of which being tied up, the workman takes one of the ends in one hand and the other in the other, and shakes the hand briskly with a particular jerk. This operation cleanses the buttons, renders them very glossy, and fit for sale.

Gold Twist Buttons. The mould of these buttons is first covered in the same manner with that of common buttons. This being done, the whole is covered with a thin plate of gold or silver, and then wrought over of different forms, with purle and gimp. The former is a kind of thread composed of silk and gold-wire twisted together; and the latter, capillary tubes of gold or silver, about the tenth of an inch long. These are joined together by means of a fine needle, filled with silk, thrust through their apertures, in the same manner as beads or bugles.

The manner of making Metal Buttons. The metal with which the moulds are intended to be covered is first cast into small ingots, and then flatted into thin plates or leaves, of the thickness intended, at the flattening mills; after which it is cut into small round pieces proportionable to the size of the mould they are intended to cover, by means of proper punches on a block of wood covered with a thick plate of lead. Each piece of metal thus cut out of the plate is reduced into the form of a button, by beating it successively in several cavities, or concave moulds, of a spherical form, with a convex puncheon of iron, always beginning with the shallowest cavity or mould, and proceeding to the deeper, till the plate has acquired the intended form: and the better to manage so thin a plate, they form ten, twelve, and sometimes even twenty-four, to the cavities, or concave moulds at once; often sealing the metal during the operation, to make it more ductile. This plate is generally called by workmen the *cap of the button*.

The form being thus given to the plates or caps, they strike the intended impression on the convex side, by means of a similar iron puncheon, in a kind of mould engraven *en creux*, either by the hammer or the press used in coining. The cavity or mould, wherein the impression is to be made, is of a diameter and depth suitable to the sort of button intended to be struck in it; each kind requiring a particular mould. Between the puncheon and the plate is placed a thin piece of lead, called by workmen a *bob*, which greatly contributes to the taking off all the strokes of the engraving; the lead, by reason of its softness, easily giving way to the parts that have relieve, and as easily insinuating itself into the traces or indentures.

The plate thus prepared makes the cap or shell of the button. The lower part is formed of another plate, in the same manner, but much flatter, and without any impression. To the last or under plate is soldered a small eye made of wire, by which the button is to be fastened.

The two plates being thus finished, they are soldered together with soft solder, and then turned in a lathe. Generally indeed they use a wooden mould, instead of the under plate; and in order to fasten it, they pass a thread or gut across, through the middle of the mould, and fill the cavity between the mould and the cap with cement, in order to render the button firm and solid;

for the cement entering all the cavities formed by the relieve of the other side, sustains it, prevents its flattening, and preserves its bosse or design.

BUTTON, in the manege. Button of the reins of a bridle, is a ring of leather, with the reins passed thro' it, which runs all along the length of the reins. To put a horse under the button, is when a horse is stopped without a rider upon his back, the reins being laid on his neck, and the button lowered so far down that the reins bring in the horse's head, and fix it to the true posture or carriage. It is not only the horses which are managed in the hand that must be put under the button; for the same method must be taken with such horses as are bred between two pillars, before they are backed.

BUTTON Wood. See CEPHALANTHUS.

BUTTON'S Bay, the name of the north part of Hudson's bay, in North America, whereby Sir Thomas Button attempted to find out a north-west passage to the East Indies. It lies between 80° and 100° west longitude, and between 60° and 66° north latitude.

BUTTON-Stone, in natural history, a kind of figured stone, so denominated from its resembling the button of a garment. Dr Hook gives the figure of three sorts of button-stones, which seems to have been nothing else but the filling up of three several sorts of shells. They are all of them very hard flints; and have this in common, that they consist of two bodies, which seem to have been the filling up of two holes or vents in the shell. Dr Plot describes a species finely striated from the top, after the manner of some hair buttons. This name is also given to a peculiar species of slate found in the marquise of Bareith, in a mountain called *Fichtelberg*; which is extremely different from the common sorts of slate, in that it runs with great ease into glass in five or six hours time, without the addition of any salt or other foreign substance, to promote its vitrification, as other stones require. It contains in itself all the principles of glass, and really has mixed in its substance the things necessary to be added to promote the fusion of other stony bodies. The Swedes and Germans make buttons of the glass produced from it, which is very black and shining, and it has hence its name *button-stone*. They make several other things also of this glass, as the handles of knives and the like, and send a large quantity of it unwrought in round cakes as it cools from the fusion into Holland.

BUTTRESS, a kind of butment built archwise, or a mass of stone or brick, serving to prop or support the sides of a building, wall, &c. on the outside, where it is either very high, or has any considerable load to sustain on the other side, as a bank of earth, &c.—Buttresses are used against the angles of steeples and other buildings of stone, &c. on the outside, and along the walls of such buildings as have great and heavy roofs, which would be subject to thrust the walls out, unless very thick, if no buttresses were placed against them. They are also placed for a support and butment against the feet of some arches, that are turned across great halls in old palaces, abbeys, &c.

BUTUS (anc. geog.), a town of Lower Egypt, on the west side of the branch of the Nile, called *Thermuthiacus*; towards the mouth called *Ostium Sebennyticum*: in this town stood an oracle of Latona, (Strabo, Herodotus). Ptolemy places Butus in the Nomos

Phthenotes:

Button
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Butus.

Butzaw
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Buxton.

Phithenotes: it is also called *Buto, us*, (Herodotus, Stephanus). It had temples of Apollo and Diana, but the largest was that of Latona, where the oracle stood.

BUTZAW, a town of lower Saxony, in Germany; it stands upon the river Varnow, on the road from Schwerin to Rostock, lying in E. Long. 13. 12. N. Lat. 54. 50.

BUVETTE, or BEUVETTE, in the French laws, an established place in every court, where the lawyers and counsellors may retire, warm themselves, and take a glass of wine by way of refreshment, at the king's charge. There is one for each court of parliament, but these are only for persons belonging to that body; there are others in the *palais*, whither other persons also resort.

BUXENTUM, (Livy, Velleius, Ptolemy, Mela, Pliny); PYXUS, (Strabo, Pliny); a town of Lucania, first built by the people of Messana, but afterwards deserted, (Strabo). A Roman colony was sent thither, (Livy, Velleius): and when found still thin of inhabitants, a new colony was sent by a decree of the senate. Its name is from *buxus*, the box-tree, growing plentifully there. Strabo says, the name *Pyxus* includes a promontory, port, and river, under one. Now *Policastro*, in the Hither Principato of Naples. E. Long. 15. 40. N. Lat. 40. 20.

BUXTON, a place in the peak of Derbyshire, celebrated for its medicinal waters, and lying in W. Long. 0. 20. N. Lat. 53. 20.

It has been always believed by our antiquaries, that the Romans were acquainted with these wells, and had frequented them much, as there is a military way still visible, called the *Bath-gate*, from Burgh to this place. This was verified about 50 years ago, when Sir Thomas Delves, of Cheshire, in memory of a cure he received here, caused an arch to be erected; in digging the foundations for which, they came to the remains of a solid and magnificent structure of Roman workmanship; and in other places of the neighbourhood, very capacious leaden vessels, and other utensils, of Roman workmanship, have been discovered. These waters have always been reckoned inferior to those in Somersetshire; but seem never to have been totally diffused. They are mentioned by Leland, as well known 200 years ago; but it is certain they were brought into greater credit by Dr Jones in 1572, and by George earl of Shrewsbury, who erected a building over the bath, then composed of nine springs. This building was afterwards pulled down, and a more commodious one erected at the expence of the earl of Devonshire. In doing this, however, the ancient register of cures drawn up by the bath-warden, or physician attending the Baths, and subscribed by the hands of the patients, was lost.

The warm waters of Buxton are, the bath, consisting of nine springs, as already mentioned, St Ann's well, and St Peter's or Bingham well. St Ann's well rises at the distance of somewhat more than 32 yards north-east from the bath. It is chiefly supplied from a spring on the north side, out of a rock of black limestone or bastard marble. It formerly rose into a stone basin, shut up within an ancient Roman brick wall, a yard square within, a yard high on three sides, and open on the fourth. But, in 1709, Sir Thomas Delves, as already mentioned, erected an arch over it which still

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continues. It is 12 feet long, and as many broad, set round with stone steps on the inside. In the midst of this dome the water now springs up into a stone basin two feet square. St Peter's or Bingham well rises about 20 yards south-east of St Ann's. It is also called *Leigh's well*, from a memorable cure received from it by a gentleman of that name. It rises out of a black limestone, in a very dry ground; and is not so warm as St Ann's well.

From the great resort of company to the waters, this place has grown into a large straggling town, which is daily increasing. The houses are chiefly, or rather solely, built for the reception of invalids; and many of them are not only commodious, but elegant. The duke of Devonshire has lately erected a most magnificent building in the form of a crescent, with piazzas, under which the company walk in wet or cold weather. It is divided into different hotels, shops, &c. with a public coffee-room, and a very elegant room for assemblies and concerts.

The hot water resembles that of Bristol. It has a sweet and pleasant taste. It contains the calcareous earth, together with a small quantity of sea salt, and an inconsiderable portion of a purging salt; but no iron can be discovered in it. This water taken inwardly is esteemed good in the diabetes; in bloody urine; in the bilious cholic; in loss of appetite, and coldness of the stomach; in inward bleedings; in atrophy; in contraction of the vessels and limbs, especially from age; in cramps and convulsions; in the dry asthma without a fever; and also in barrenness. Inwardly and outwardly, it is said to be good in rheumatic and scorbutic complaints; in the gout; in inflammation of the liver and kidneys, and in consumptions of the lungs; also in old strains; in hard callous tumors; in withered and contracted limbs; in the itch, scabs, nodes, chalky swellings, ring worms, and other similar complaints.—Besides the hot water, there is also a cold chalybeate water, with a rough irony taste: It resembles the Tunbridge water in virtues.

For the methods of composing artificial Buxton water, or of impregnating the original water with a greater quantity of its own gas or with other gases, see *WATERS (Medicinal)*.

BUXTON (Jedediah), a prodigy with respect to skill in numbers. His father, William Buxton, was school-master of the same parish where he was born in 1704: yet Jedediah's education was so much neglected, that he was never taught to write; and with respect to any other knowledge but that of numbers, seemed always as ignorant as a boy of ten years of age. How he came first to know the relative proportions of numbers, and their progressive denominations, he did not remember; but to this he applied the whole force of his mind, and upon this his attention was constantly fixed, so that he frequently took no cognizance of external objects, and when he did it, it was only with respect to their numbers. If any space of time was mentioned, he would soon after say it was so many minutes; and if any distance of way, he would assign the number of hairs breadths, without any question being asked, or any calculation expected by the company. When he once understood a question, he began to work with amazing facility, after his own method, without the use of a pen, pencil, or chalk, or even understanding the common

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rules of arithmetic as taught in the schools. He would stride over a piece of land or a field, and tell you the contents of it almost as exact as if you had measured it by the chain. In this manner he measured the whole lordship of Elmton, of some thousand acres, belonging to Sir John Rhodes, and brought him the contents, not only in acres, roods, and perches, but even in square inches. After this, for his own amusement, he reduced them into square hair-breadths, computing 48 to each side of the inch. His memory was so great, that while resolving a question, he could leave off, and resume the operation again where he left off the next morning, or at a week, a month, or at several months, and proceed regularly till it was completed. His memory would doubtless have been equally retentive with respect to other objects, if he had attended to other objects with equal diligence; but his perpetual application to figures prevented the smallest acquisition of any other knowledge. He was sometimes asked, on his return from church, whether he remembered the text, or any part of the sermon, but it never appeared that he brought away one sentence; his mind, upon a closer examination, being found to have been busied, even during divine service, in his favourite operation, either dividing some time, or some space, into the smallest known parts, or resolving some question that had been given him as a test of his abilities.

This extraordinary person living in laborious poverty, his life was uniform and obscure. Time, with respect to him, changed nothing but his age; nor did the seasons vary his employment, except that in winter he used a flail, and in summer a ling-hook. In the year 1754, he came to London, where he was introduced to the royal society, who, in order to prove his abilities, asked him several questions in arithmetic, and he gave them such satisfaction, that they dismissed him with a handsome gratuity. In this visit to the metropolis, the only object of his curiosity, except figures, was his desire to see the king and royal family; but they being just removed to Kensington, Jedediah was disappointed. During his residence in London, he was taken to see King Richard III. performed at Drury-lane playhouse; and it was expected, either that the novelty and the splendor of the show would have fixed him in astonishment, or kept his imagination in a continual hurry, or that his passions would, in some degree, have been touched by the power of action, if he had not perfectly understood the dialogue. But Jedediah's mind was employed in the playhouse just as it was employed in every other place. During the dance, he fixed his attention upon the number of steps; he declared, after a fine piece of music, that the innumerable sounds produced by the instruments had perplexed him beyond measure; and he attended even to Mr Garrick, only to count the words that he uttered, in which he said he perfectly succeeded. Jedediah returned to the place of his birth, where, if his enjoyments were few, his wishes did not seem to be more. He applied to his labour, by which he subsisted with cheerfulness; he regretted nothing that he left behind him in London; and it continued to be his opinion, that a slice of rusty bacon afforded the most delicious repast.

BUXTORF (John), a learned professor of Hebrew at Basil, who, in the 17th century, acquired the highest reputation for his knowledge of the Hebrew and Chal-

dee languages. He died of the plague at Basil in 1629, aged 65. His principal works are, 1. A small but excellent Hebrew grammar; the best edition of which is that of Leyden in 1701, revised by Leusden. 2. A treasure of the Hebrew grammar. 3. An Hebrew concordance, and several Hebrew lexicons. 4. *Institutio epistolaris Hebraica*. 5. *De abbreviaturis Hebraeorum*, &c.

BUXTORF (John), the son of the former, and a learned professor of the oriental languages at Basil, distinguished himself, like his father, by his knowledge of the Hebrew language, and his rabbinical learning. He died at Basil in 1664, aged 65 years. His principal works are, 1. His translation of the *More Nevochim*, and the *Cozri*. 2. A Chaldee and Syriac lexicon. 3. An anticritic against Cappel. 4. A treatise on the Hebrew points and accents against the same Cappel.

BUXUS, the BOX-TREE: A genus of the tetrandria order, belonging to the monœcia class of plants; and in the natural method ranking under the 38th order, *Tricocœa*. The male calyx is triphyllous; the germen an embryo, or imperfect rudiment. The female calyx is tetraphyllous: there are three petals, and as many styles: the capsule three beaked and trilocular, with three seeds.

Species. 1. The arborefcens, with oval leaves. 2. The angustifolia, or narrow-leaved box. These two sorts grow in great plenty upon Boxhill near Dorking in Surry in England. Here were formerly large trees of that kind; but now they are much fewer in number. There are two or three varieties of the first sort which are propagated in gardens; one with yellow, and the other with white striped leaves. Another hath the tips of the leaves only marked with yellow, and is called *tipped box*. 3. The suffruticosa, dwarf, or Dutch box, commonly used for bordering of flower-beds.

Culture. The two first sorts may be raised from seeds; and may be also propagated by cuttings, which are to be planted in the autumn in a shady border. The best season for removing these trees is in October; though, if care be used to take them up with a good ball of earth, they may be transplanted almost at any time except the middle of summer. The dwarf box is increased by parting the roots, or planting the slips; but as it makes so great an increase of itself, and so easily parts, it is hardly worth while to plant the slips that have no roots.

Uses. The tree or large box is proper to intermix in clumps of evergreens, &c. where it adds to the variety of such plantations: they are a very great ornament to cold and barren soils where few other things will grow. The dwarf kind of box is used for bordering flower-beds, or other purposes of that nature; and for this it far excels any other plant; being subject to no injuries from cold or heat. It is of long duration; is easily kept handsome; and, by the firmness of its rooting, keeps the mould in the borders from washing into the gravel walks more effectually than any plant whatever.—Boxwood is extremely hard and smooth, and therefore well adapted to the use of the turner. Combs, mathematical instruments, knife-handles, and button-moulds, are made of it. It may properly enough be substituted in default of ebony, the yellow alburnum of which it perfectly resembles. In the Ephemerides of the curious there is the following account of the ef-

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ficacy of boxwood in making hair grow. "A young woman of Gunberg in Lower Silefia, having had a malignant dysentary which occasioned the falling off of all her hair, was advised by a person, some time after her recovery (as her hair was not likely to grow again of itself, her head being then as bare as the hand), to wash it all over with a decoction of boxwood; which she readily did, without the addition of any other drug. Hair of a chestnut colour grew on her head, as she was told it would do; but having used no precaution to secure her neck and face from the lotion, they became covered with red hair to such a degree, that she seemed little different from an ape or a monkey." This decoction has been recommended by some as a powerful sudorific, preferable even to guaiacum; but the taste readily discovers that it wants the qualities of that wood. Neither the wood nor the leaves of the box-tree at present are used for any other medicinal purpose than the distillation of an empyreumatic oil; and an oil of nearly the same quality is obtained from almost every other wood.

BUYING, the act of making a purchase, or of acquiring the property of a thing for a certain price.

Buying stands opposed to selling, and differs from borrowing or hiring, as in the former the property of the thing is alienated for perpetuity, which in the latter is not. By the civil law, persons are allowed to buy hope, *spem precio emere*, that is, to purchase the event or expectation of any thing. *E. gr.* The fish or birds a person shall catch, or the money he shall win in gaming.

There are different species of buying in use among traders: as, buying on one's own account, opposed to buying on commission; buying for ready money, which is when the purchaser pays in actual specie on the spot; buying on credit, or for a time certain, is when the payment is not to be presently made, but, in lieu thereof, an obligation given by the buyer for payment at a time future; buying on delivery, is when the goods purchased are only to be delivered at a certain time future.

BUYING the Refusal, is giving money for the right or liberty of purchasing a thing at a fixed price, in a certain time to come; chiefly used in dealing for shares in stock. This is sometimes also called by a cant name, *buying the bear*.

BUYING the Small Pox, is an appellation given to a method of procuring that disease by an operation similar to inoculation; frequent in South Wales, where it has obtained time out of mind. It is performed either by rubbing some of the *pus* taken out of a pustule of a variolous person on the skin, or by making a puncture in the skin with a pin dipped in such pus.

BUYS, a town of Dauphiny in France, situated on the borders of Provence. E. Long. 5. 20. N. Lat. 44. 25.

BUZANCOIS, a small town of Berry in France, situated on the borders of Tourain, in E. Long. 1. 29. N. Lat. 46. 38.

BUZBACH, a town of Germany, in Westerland, and the county of Holmes, on the confines of Hanau. E. Long. 10. 51. N. Lat. 50. 22.

BUZET, a small town of France, in Languedoc, seated on the river Torne, in E. Long. 1. 45. N. Lat. 43. 47.

BUZZARD, in ornithology, the name of several species of the hawk kind. See FALCO.

BYBLUS (anc. geog.), a town of Phœnicia, situated between Berytus and Botrys; it was the royal residence of Cinyras; sacred to Adonis. Pompey delivered it from a tyrant, whom he caused to be beheaded. It stood at no great distance from the sea, on an eminence, (Strabo): near it ran the Adonis into the Mediterranean. Now in ruins.

BYCHOW, a small town of Lithuania in Poland, situated on the river Nieper, in E. Long. 30. 2. N. Lat. 53. 57.

BY-LAWS, are laws made *obiter*, or by the by; such as orders and constitutions of corporations for the governing of their members, of court-leets, and courts baron; commoners, or inhabitants in villis, &c. made by common assent, for the good of those that made them, in particular cases whereunto the public law doth not extend; so that they bind farther than the common or statute law: guilds and fraternities of trades by letters patent of incorporation, may likewise make by-laws for the better regulation of trade among themselves or with others. In Scotland these laws are called laws of *birlaw*, or *burlaw*; which are made by neighbours elected by common consent in the *birlaw-courts*, wherein knowledge is taken of complaints betwixt neighbour and neighbour; which men so chosen are judges and arbitrators, and styled *birlaw-men*. And birlaws, according to Skene, are *leges rusticorum*, laws made by husbandmen, or townships, concerning neighbourhood among them. All by-laws are to be reasonable, and for the common benefit, not private advantage of particular persons, and must be agreeable to the public laws in being.

BYNG (George), lord viscount Torrington, was the son of John Byng, Esq; and was born in 1663. At the age of 15, he went volunteer to sea with the king's warrant. His early engagement in this course of life gave him little opportunity of acquiring learning or cultivating the polite arts; but by his abilities and activity as a naval commander he furnished abundant matter for the pens of others. After being several times advanced, he was in 1702 raised to the command of the *Nassau*, a third rate, and was at the taking and burning the French fleet at Vigo; and the next year he was made rear-admiral of the red. In 1704, he served in the grand fleet sent to the Mediterranean under Sir Cloudesly Shovel, as rear-admiral of the red; and it was he who commanded the squadron that attacked, cannonaded, and reduced Gibraltar. He was in the battle of Malaga, which followed soon after; and for his behaviour in that action queen Anne conferred on him the honour of knighthood. In 1705, in about two months time, he took 12 of the enemies largest privateers, with the *Thetis*, a French man of war of 44 guns; and also several merchant ships, most of them richly laden. The number of men taken on board was 2070, and of guns 334. In 1718, he was made admiral and commander in chief of the fleet; and was sent with a squadron into the Mediterranean for the protection of Italy, according to the obligation England was under by treaty, against the invasion of the Spaniards; who had the year before surprised Sardinia, and had this year landed an army in Sicily. In this expedition he dispatched captain Walton in the *Canterbury*, with five more ships in pursuit

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puruit of six Spanish men of war, with galleys, fire-ships, bomb-vessels, and store-ships, who separated from the main fleet, and stood in for the Sicilian shore. The captain's laconic epistle on this occasion is worthy of notice; which showed that fighting was his talent as well as his admiral's, and not writing.

"Sir,

"We have taken and destroyed all the Spanish ships and vessels which were upon the coast, as per margin.

Canterbury, off Syracuse,

I am, &c.

August 16th, 1718.

G. Walton."

From the account referred to, it appeared that he had taken four Spanish men of war, with a bomb-vessel and a ship laden with arms; and burned four, with a fire-ship and bomb-vessel. The king made the admiral an handsome present, and sent him plenipotentiary powers to negotiate with the princes and states of Italy as there should be occasion. He procured the emperor's troops free access into the fortresses that still held out in Sicily; sailed afterwards to Malta, and brought out the Sicilian galleys, and a ship belonging to the Turkey company. Soon after he received a gracious letter from the emperor Charles VI. written with his own hand, accompanied with a picture of his imperial majesty, set round with very large diamonds, as a mark of the grateful sense he had of his services. It was entirely owing to his advice and assistance that the Germans retook the city of Messina in 1719, and destroyed the ships that lay in the basin; which completed the ruin of the naval power of Spain. The Spaniards being much distressed, offered to quit Sicily; but the admiral declared, that the troops should never be suffered to quit the island till the king of Spain had acceded to the quadruple alliance. And to his conduct it was entirely owing that Sicily was subdued, and his Catholic majesty forced to accept the terms prescribed him by the quadruple alliance. After performing so many signal services, the king received him with the most gracious expressions of favour and satisfaction; made him rear-admiral of England and treasurer of the navy, one of his most honourable privy-council, baron Byng of Southill in the county of Bedford, viscount Torrington in Devonshire, and one of the knights companions of the Bath upon the revival of that order. In 1727, George II. on his accession to the crown, placed him at the head of his naval affairs, as first lord commissioner of the admiralty; in which high station he died January 15th 1733, in the 70th year of his age, and was buried at Southill in Bedfordshire.

BYNG (the honourable George), Esq; the unhappy son of the former, was bred to sea, and rose to the rank of admiral of the blue. He gave many proofs of courage; but was at last shot, upon a dubious sentence for neglect of duty, in 1757. See BRITAIN, n° 433.

BYRLAW or BURLAW Laws in Scotland. See BY-LAWS.

BYROM (John), an ingenious poet of Manchester, born in 1691. His first poetical essay appeared in the Spectator, N° 603, beginning, "My time, O ye Muses, was happily spent;" which, with two humorous letters on dreams, are to be found in the eighth volume. He was admitted a member of the royal society in 1724; and having originally entertained thoughts of practising physic, to which the title of doctor is incident, that was

the appellation by which he was always known: but reducing himself to narrow circumstances by a precipitate marriage, he supported himself by teaching a new method of writing short-hand, of his own invention; until an estate devolved to him by the death of an elder brother. He was a man of lively wit; of which, whenever a favourable opportunity tempted him to indulge it, he gave many humorous specimens. He died in 1763; and a collection of his Miscellaneous poems was printed at Manchester, in 2 vols 8vo. 1773.

BYRRHUS, in zoology, a genus of insects belonging to the order of coleoptera. The feelers are clavated, pretty solid, and a little compressed. There are five species, all of which are to be found on particular plants; and principally distinguished from one another by the colour and figure of the elytra, or crustaceous wing-cases.

The byrrhus scrophulariæ, which is very common upon flowers, is very hard to describe properly. Its body is almost oval; the ground colour black; but the under part of the abdomen appears almost entirely white, owing to an infinite number of minute scales, of that colour with which it is covered. The head is small, and often drawn back under the thorax, which latter is broad, covered with white and reddish scales, through which the black ground in some places appears. The elytra are bent in, and even rather inclose the sides and under part of the body. They are black, with white and red scales, which form a kind of embroidered work. First, there is observable a white transversal stripe, somewhat broad on the top of the elytra; at the bottom of them, there are two white distinct spots near the suture, one upon each elytrum. The ruddy colour occupies chiefly the lower end of the suture of the elytra, and the upper part of them, near their connection with the thorax. This species is common in gardens. If rubbed, the small coloured scale comes off, and the insect appears almost entirely black.

The byrrhus verbasci is much smaller than the preceding species; its figure and form are however the same; only that the scales which cover the elytra are more numerous and closer set, so that the black colour, which constitutes the ground of the elytra, is nowhere to be seen. The scales form three stripes, white, transversal, and undulated, between which intervene stripes of a reddish brown shaped in the same manner. They are sometimes to be met with stripped of part of their scales, which renders them so different as not to be known for the same creatures. The larvæ of this insect, as also those of the preceding species, are extremely voracious, and much resemble those of the dermestæ. People who collect subjects of natural history, are greatly pestered, and but too well acquainted with them.

BYSSUS, in botany: A genus of the 57th natural order, viz. *Alga*, belonging to the cryptogamia class of plants. It has a *down*, or very fine uniform powder. The character is taken from this circumstance, that they are covered with a simple capillary filament or down, resembling soft dust. There are 15 species, all natives of Britain, growing upon rotten wood, old walls, &c.

Byssus, or *Byssum*, a fine thready matter produced in

Byrrhus,
Byssus.

Byssus, in India, Egypt, and about Elis in Achaia, of which **Byzantium** the richest apparel was anciently made, especially that wore by the priests both Jewish and Egyptian. Some interpreters render the Greek *Byssos*, which occurs both in the Old and New Testament, by *fine linen*. But other versions, as Calvin's and the Spanish printed at Venice in 1556, explain the word by *silk*; and yet byssus must have been different from our silk, as appears from a multitude of ancient writers, and particularly from Jul. Pollux. M. Simon, who renders the word by fine linen, adds a note to explain it; viz. "that there was a fine kind of linen very dear, which the great lords alone wore in this country as well as in Egypt." This account agrees perfectly well with that given by Hesychius, as well as what is observed by Bochart, that the byssus was a finer kind of linen, which was frequently dyed of a purple colour. Some authors will have the byssus to be the same with our cotton; others take it for the *linum asbestinum*; and others for the lock or bunch of silky hair found adhering to the pinna marina, by which it fastens itself to the neighbouring bodies. Authors usually distinguish two sorts of byssus; that of Elis; and that of Judæa, which was the finest. Of this latter were the priestly ornaments made. Bonfrerius notes, that there must have been two sorts of byssus, one finer than ordinary, by reason there are two Hebrew words used in Scripture to denote byssus; one of which is always used in speaking of the habit of the priests, and the other of that of the Levites.

Byssus Asbestinus, a species of asbestus or incombustible flax, composed of fine flexible fibres parallel to one another. It is found plentifully in Sweden, either white or of different shades of green. At a copper mine in Westmannland it forms the greatest part of the vein out of which the ore is dug; and by the heat of the furnace which melts the metal, is changed into a pure semitransparent slag or glass.

BYZANTIUM, an ancient city of Thrace, situated on the Bosphorus. It was founded, according to Eusebius, about the 30th Olympiad, while Tullus Hostilius reigned in Rome. But, according to Diodorus Siculus, the foundations of this metropolis were laid in the time of the Argonauts, by one Byzas, who then reigned in the neighbouring country, and from whom the city was called *Byzantium*. This Byzas, according to Eustathius, arrived in Thrace a little before the Argonauts came into those seas, and settled there with a colony of Megarenses. Velleius Paterculus ascribes the founding of Byzantium to the Milesians, and Ammianus Marcellinus to the inhabitants of Attica. Some ancient medals of Byzantium, which have reached our times, bear the name and head of Byzas, with the prow of a ship on the reverse. The year after the destruction of Jerusalem by Titus, Byzantium was reduced to the form of a Roman province. In the year 193 this city took part with Niger against Severus. It was strongly garrisoned by Niger, as being a place of the utmost importance. It was soon after invested by Severus; and as he was universally hated on account of his cruelty, the inhabitants defended themselves with the greatest resolution. They had been supplied with a great number of warlike machines, most of them invented and built by Periscus a native of Nicæa, and the greatest engineer of his age. For a long time they

baffled all the attempts of the assailants, killed great numbers of them, crushed such as approached the walls with large stones; and when stones began to fail, they used the statues of their gods and heroes. At last they were obliged to submit, through famine, after having been reduced to the necessity of devouring one another. The conqueror put all the magistrates and soldiers to the sword; but spared the engineer Periscus. Before this siege, Byzantium was the greatest, most populous, and wealthiest city of Thrace. It was surrounded by walls of an extraordinary height and breadth; and defended by a great number of towers, seven of which were built with such art, that the least noise heard in one of them was immediately conveyed to all the rest. Severus, however, no sooner became master of it, than he commanded it to be laid in ashes. The inhabitants were stripped of all their effects, publicly sold for slaves, and the walls levelled with the ground. But by the chronicle of Alexandria we are informed, that soon after this terrible catastrophe, Severus himself caused a great part of the city to be rebuilt, calling it *Antonina* from his son Caracalla, who assumed the surname of *Antoninus*. In 262, the tyrant Galienus wreaked his fury on the inhabitants of Byzantium. He intended to besiege it; but on his arrival, despaired of being able to make himself master of such a strong place. He was admitted the next day, however, into the city; and without any regard to the terms he had agreed to, caused the soldiers and all the inhabitants to be put to the sword. Trebellius Pollio says, that not a single person was left alive. What the reason was for such an extraordinary massacre, we are no where informed. In the wars between the emperors Licinius and Maximin, the city of Byzantium was obliged to submit to the latter, but was soon after recovered by Licinius. In the year 323, it was taken from Licinius by Constantine the Great, who in 330 enlarged and beautified it, with a design to make it the second, if not the first, city in the Roman empire. He began with extending the walls of the ancient city from sea to sea; and while some of the workmen were busied in rearing them, others were employed in raising within them a great number of stately buildings, and among others a palace no way inferior in magnificence and extent to that of Rome. He built a capitol and amphitheatre, made a circus maximus, several forums, porticoes, and public baths. He divided the whole city into 14 regions, and granted the inhabitants many privileges and immunities. By this means Byzantium became one of the most flourishing and populous cities of the empire. Vast numbers of people flocked thither from Pontus, Thrace, and Asia, Constantine having by a law, enacted this year (330), decreed, that such as had lands in those countries should not be at liberty to dispose of them, nor even leave them to their proper heirs at their death, unless they had an house in his new city. But however desirous the emperor was that his city should be filled with people, he did not care that it should be inhabited by any but Christians. He therefore caused all the idols to be pulled down, and all their churches consecrated to the true God. He built besides an incredible number of churches, and caused crosses to be erected in all the squares and public places. Most of the buildings being finished, it was solemnly dedicated

Byzantium,
Bzovius.

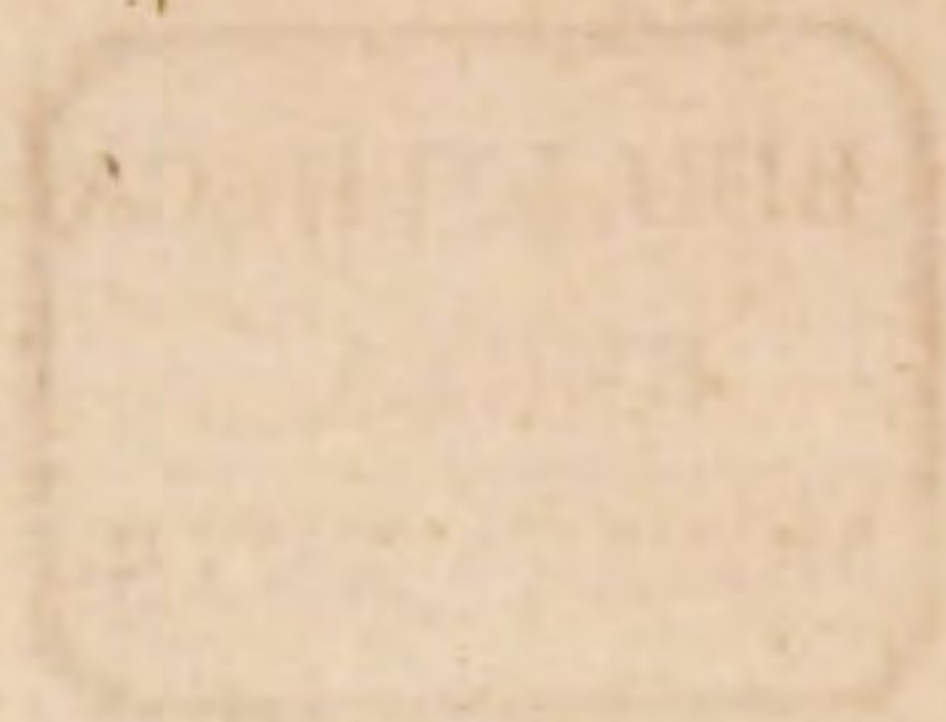
to the Virgin Mary, according to Cedrenus, but, according to Eusebius, to the God of Martyrs. At the same time Byzantium was equalled to Rome. The same rights, immunities, and privileges, were granted to its inhabitants as to those of the metropolis. He established a senate and other magistrates, with a power and authority equal to those of old Rome. He took up his residence in the new city; and changed its name to CONSTANTINOPLE.

BZOVIVS (Abraham), one of the most celebrated

writers in the 17th century, with respect to the astonishing number of pieces composed by him. His chief work is the continuation of Baronius's annals. He was a native of Poland, and a Dominican friar. Upon his coming to Rome, he was received with open arms by the Pope, and had an apartment assigned him in the Vatican. He merited that reception, for he has imitated Baronius to admiration in his design of making all things conspire to the despotic power and glory of the papal see. He died in 1637, aged 70.

Bzovius.

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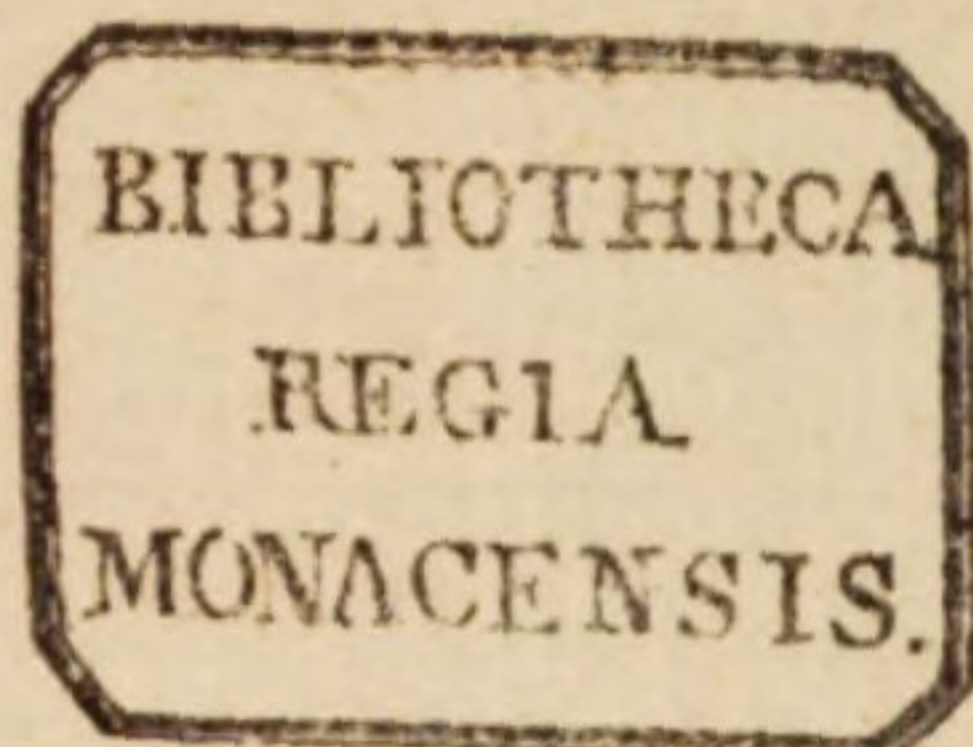
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